VII

THE

ELEVENTH ANNUAL REPORT

FROM

THE GOVERNORS

OF THE

MADRAS UNIVERSITY,

FOR

1851-52.

MADRAS:
PRINTED BY D. P. L. C. CONNOR, AT THE CHRISTIAN KNOWLEDGE SOCIETY'S PRESS, CHURCH STREET, VEPERY.
1852.

MADRAS UNIVERSITY.

President.

GEORGE NORTON, ESQ.

Governors.

J. OUCHTERLONY, ESQ. | C. RUNGANADUM, ESQ.

J. B. NORTON, ESQ.

Secretary.

A. J. ARBUTHNOT, ESQ.

Head Master of the High-School..... E. B. POWELL, ESQ.

Second Master do. do. ..... A. A. GORDON, ESQ.

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Second do. ..... „ M. DUTT, } *Fourth do.* „ T. B. PEPPIN.

Writing Master and Librarian.....MR. T. F. JOHNSON.

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VIZAGAPERMAUL IYER.....*Tamil do.*

STREENEVASSA RAGAVA CHARRY.... *Do. Asst. do.*

P. CHINNIAH SOOREE..... } *Teloogoo Pundits.*

HYAGREEVA SASTRY..... }

FUNDAMENTAL RULES.

1st. That it is expedient that a Central Collegiate Institution or University should be established at Madras.

2d. The Madras University to consist of two principal Departments, a College for the higher branches of literature, philosophy and science, and a High School for the cultivation of English literature and of the vernacular languages of India, and the elementary departments of philosophy and science.

3d. The governing body to be denominated the President and Governors.

4th. The College department to be placed under a Principal and Professors. The High School under a Head Master and Tutors.

5th. Members of all creeds and sects shall be admissible; consistently with which primary object, care shall be taken to avoid whatever may tend to violate or offend the religious feelings of any class.

6th. It shall form no part of the design of this Institution to inculcate doctrines of religious faith, or to supply books with any such view.

7th. No pupils shall be admissible in any department, but such as are able to read and write the English language intelligibly.

8th. Pupils shall pay according to such rates as may be hereafter established by the President and Governors.

9th. Should any sums be hereafter bestowed upon the Institution for the purpose of endowing Scholarships in the High School or Studentships in the College, the Students and Scholars appointed to them shall be admitted in such manner as may be determined by the President and Governors.

10th. The first President and Governors shall be appointed by the Governor in Council. There shall be 14 Governors, 7 of whom shall be Native Hindoos or Musselmauns, besides the President. The appointment of the President and 6 of the Governors shall rest permanently with the Governor in Council.

11th. Vacancies shall be effected by any continued absence from the limits of Madras for the space of two years, or by departure for England or for any permanent residence in any other presidency, or by resignation addressed to the Secretary, or by removal under order of the Governor in Council.

12th. Every Donor to the amount of 5,000 Rupees shall if, and while, resident within the limits of Madras, become a life Governor, and, if not resident in Madras, shall have power to appoint a Governor who is so resident (subject to the confirmation of the Governor in Council) to hold on the same terms as the other Governors. But in all cases of persons so becoming life Governors, the Governor in Council may appoint a Governor who is not a Native, in case such life Governor or his Appointee be a Native, and the remaining Governors may elect a Native Governor in case such life Governor or his Appointee be not a Native.

13th. The president and governors shall frame general rules for conducting the current affairs of the Institution, and they shall meet not less than once per month, five forming a quorum.

14th. In all questions to be decided by vote the President shall have a casting vote.

15th. The first business to be done at all Meetings when the President shall happen to be absent, shall be to appoint a Chairman who shall possess a casting vote.

16th. All rules and regulations to be made by the President and Governors shall be confirmed within six months by the Governor in Council, in default of which they shall be considered thereafter as annulled.

17th. The Governor in Council shall have power to remove not only any President or Governor, but also all persons holding any office or appointment whatever in the Institution. The President and Governors shall have power to remove all persons holding any office or appointment under them in the Institution.

18th. In case the governor in Council shall hereafter appoint any Board of Public Instruction, the Members thereof shall be Visitors of this Institution, and shall have power to call for all papers and information. They shall also elect the eight Governors who are not nominated by the Governor in Council.

19th. The President and Governors shall make one annual Report to be furnished to the Governor in Council, or to the Board of Public instruction, as the Governor in Council shall direct, which Reports shall contain an account of receipts and disbursements, a list of donors and subscribers, and a general statement of their proceedings and of the progress of the Institution.

ELEVENTH ANNUAL REPORT

OF THE PRESIDENT AND GOVERNORS OF THE MADRAS UNIVERSITY.

Madras, March 26th, 1852.

To

The Right Honorable the
GOVERNOR IN COUNCIL,.
Fort Saint George.

RIGHT HONORABLE SIR,

WE address ourselves to our Eleventh Annual Report on the state and progress of the Madras University with undiminished conviction of the increasing value of the Institution, and with unimpaired confidence of its eventual success.

We again submit to the consideration of Government the expediency of an early addition of Members to our body, as we are no longer numerous enough to act according to the Provisions of the Fundamental Rules in carrying on the duties of our charge.

The number of scholars at the date of the last report was 180. The present number is 182.

In adverting to the smallness of the increased number of scholars at present on the list we have to notice a cause of its diminution very much below our expectation. In September last an indisposition was manifested by many of the scholars to the reception into the school of one or two Pariah lads then recently admitted—and, under the ill-guidance, if not instigation, of prejudiced parties outside of the school (as there appears some reason to believe) several of the scholars so conducted themselves in their manner of remonstrating against the introduction of these scholars as

the exception of the Senior Scholars of the Hindu College of Calcutta—but to them, (or at any rate, to the Select of their class) they are decidedly inferior. Nor can this, in the nature of things, be otherwise. The Senior Scholars of the Hindu College appear to have been a longer period under tuition, and have dedicated the latter portion of their studies, under distinguished professors, more exclusively to those higher departments of literature, and exercises in composition on subjects, which have been but offered to the taste of the fourth class scholars of our High School. Indeed, we have several times pointed out to the notice of Government that some branches of study such as Mental Philosophy, Political Economy, and the Philosophy of History—do not form a portion of the studies originally and ordinarily comprehended within the instruction of the High School. Although the forwardness of some of the youths, and their eagerness for knowledge, have induced us to allow of the partial introduction of them, in the absence of any Collegiate Department to which that thirst for information might attract them.

When, therefore, the very just remarks of the Public Examiners refer to the inadequacy of comprehension, and deficiencies in original and independent thought, which characterize the exercises in mental philosophy, in historical discussion, and in poetical criticism, it is to be recollected that they apply to youthful scholars of the quality above described. Neither can much profundity be expected in their thoughts as essayists. The subjects they deal with are novel to their consideration, and they can do little but repeat or explain what they have recently learnt.

To expatiate further on these topics would lead us into a repetition of former observations in our reports. Our Appendix will contain the usual amount of selections from the Extempore and other Essays; some of them written upon a theme calculated to test in no small degree the sentiments of our superior scholars on the more characteristic evil of caste prejudices. The subject given out for the Elphinstone Annual Prize Essay was the following:—"Freedom for every man to

" apply his energies in the channel he considers most advan-
" tageous to himself is essential to the prosperity of a coun-
try." It is gratifying to observe that the youthful candidates for this Prize (specimens of whose essays, as well as that of the successful competitor, will be found in the Appendix) have boldly met the obvious question involved in the theme, and have treated it in that liberal and enlightened spirit which has begun to spread among the educated classes of the Native community. Freedom of thought and freedom of action—checked and guided by reason and principle only—are tenets rapidly gaining advocates among the rising generation of the Native community, and we hail this among the first and most wholesome fruits of that superior education which it is the aim of our Institution to diffuse.

We have thought it to the purpose, upon the completion of the first decade since the foundation of the Institution, the Anniversary of which is now celebrated, to review its progressive prosperity, and to disabuse those who may have supposed its success to have retrograded from the early promise.

In the Appendix will be found a tabular statement showing its gradual and regular increase in the average number, in the amount of paying scholars, and in the amount total of fees paid throughout the first ten years with the exception, from the particular reason already stated, of the last year.

Slow as the progress has been the regularity of it betokens its certainty. We have formerly, and for several years successively, pointed out what we considered would be the effectual means to increase as well the number of the scholars as the greater efficiency of the method of Tuition. We hope it may not be considered a vain reiteration to mention that we allude to the building of a more convenient and appropriate structure, in a more favorable situation—to the establishment of Test Certificates of Proficiency—and to a more efficient system of Vernacular instruction in the mode already submitted by us to the sanction of Government.

We are led to believe that some misapprehension exists among the Public as to the small educational results compared with the outlay for such objects, and comparatively also with the cost and results at other Presidencies. Some misapprehension may also prevail as to the number of scholars for which the Institution was designed. On each of these heads we desire to offer a few remarks.

The average amount of outlay in support of the High School may be taken, in round numbers, at about 26,000 Rupees per annum, and, including fees paid by the scholars, at about 30,000 Rupees—at the present time when the number of Scholars may be reckoned at about 180. Now the total Annual Expenditure at the Hindu College at Calcutta (including such fees) is 58,397 Rupees for 471 scholars. The difference is too small for notice, and it is to be recollected that house rent is not reckoned, as with us, in the Hindu College expenditure. If 100 more scholars were added (as may soon reasonably be expected) to the High School, the expenditure would be but little increased, and nearly two-thirds the number of scholars would be then educated at the High School for about one half of the expenditure of the Hindu College—and here it may be mentioned that the amount of school fees paid by 916 scholars of the Elphinstone Institution at Bombay was by the last report but Rupees 6,582, while the amount paid by the High School was for the last year Rupees 6,166 in a school containing but 180.

If the High School had as many as 500 scholars, it would have as many as could be accommodated and adequately taught, on its present basis and organization, and more than the Hindu College, and the best among the superior schools in Bengal contain. It would be maintained at an outlay not two-thirds in amount of the outlay for a similarly increased number at that seminary. It is to be observed that at the Elphinstone Institution at Bombay, where 916 pupils receive instruction—705 of them "are taught the English language, "and arithmetic, geography and history in their own several

languages" and but 211(forming the Upper School and College Department) "receive that more extensive general knowledge which is imparted through the medium chiefly of English." At our High School boys are not admissible until they are "able to read and write English intelligibly"—and it is probable therefore that they are such as would be admissible into the Upper School at Bombay. We do not mean to suggest that a High School containing even 500 scholars of the qualifications required, at our High School or in the Upper School of the Elphinstone Institution at Bombay, would be at all commensurate with the design of the scholastic department of the Madras University. But, if, five, or more (as in Bengal) or even fifty High Schools, of a similar character to that of the present High School, were established under the Government of the University Board, the organization and maintenance of them would be entirely within the scope and design of the Madras University. Each seminary, however, as in Bengal, would require its separate Establishment—if our views are correct, that a school containing 500 is a sufficient institution in itself. The more schools, whether central, or provincial, or both, that were organized as High Schools, and as parcels of the same comprehensive Institution, the greater would eventually become the access therefrom of students engaging under professors in the higher departments of literature, the sciences, philosophy and the arts.

The majority of the Board are by no means disposed to consider the numerical amount of the scholars the only, or true, test of the value or efficiency of the Institution. It would be easy to increase the number of scholars to one thousand or upwards by lowering or abolishing the school fee, thereby withdrawing probably a considerable portion of those scholars who obtain elementary and eleemosynary education at Mission and other schools at the Presidency. But it is to be observed that the policy of gratuitous education was denounced by the Supreme Government more than twenty years ago. And without abandoning which, it may reasonably be doubted, whether the astonishing progress of superior educa-

tion among the higher classes, particularly in Bengal, which has characterized the last twenty years, would have been realized. At all events the majority of the Board are apprehensive lest such a measure might change the quality and character of the Institution itself, and render it the resort of the lower instead of the higher classes—and of those who would be satisfied with that merely elementary education which would fit them only for the inferior pursuits of life.

If inquiry shall be made in a candid, and intelligent, and a reflective spirit into the effects as yet produced from the foundation of the University, we think it will be sufficiently answered by exhibiting (as we do in the Appendix) a list of the twenty-three Proficients who have proceeded from the High School, with a reference to their employments. In every branch of the public service are these youths to be found, some of them in distinguished and highly responsible stations, and not one (with the exception of a youth of independent wealth) has failed to gain a position which opens the most brilliant prospects to real desert. Four are engaged in the task of tuition—one of them educating the Princes of Travancore—one of them as the principal of Pacheappah's school. Besides this influential body of Proficients a numerous body of scholars have proceeded from the fourth class whose educational attainments are of a somewhat extensive and superior quality, and a still more numerous body have proceeded from the third Class possessing a facility in the English language, and other acquirements to a very respectable amount. Many of these youths are engaged in prominent offices in the Public Service, and three of them are engaged in tuition. Numerous and numerously attended as are the Schools in Bengal, it is only from the senior classes of the very highest Schools that scholars proceed of the distinguished attainments which characterize Proficients and fourth class scholars of the High School. And the number of those distinguished scholars in Bengal does not (as far as we can gather from the Reports) greatly surpass the number of Proficients proceeding from the High School. Neither can we doubt of the good effects

of the diffusion of such a body of highly educated youths throughout every part of the Presidency. We trust to the permanent prevalence of those moral and elevated principles which have been anxiously and sedulously inculcated through their career at the School, and of which their exercises from time to time published with our reports have given some warrant. We rely on the good report of them from those employers who have sought for their services, and have known their value by experience. We encourage animating hopes from the zeal with which they have busied themselves in spreading the benefits of education among those within their influence, and in elevating the views of those within their own sphere of life with whom they associate.

Nor is this all. On every side, and month by month, we hear of numerous and increasing seminaries founded and supported by voluntary contributions, and by the voluntary labor of Natives alone. The zeal manifested in the fostering the means of knowledge may even be thought to outrun sound discretion, and more is attempted than can well be accomplished. But it seems to us much that such a spirit should have been awakened among the Native community. It is to the Proficients of the High School, and to the passed scholars of the fourth class that the merit of working this gratifying change in public feeling is in a main degree owing.

We have ventured on these observations with no immediate view of upholding the scheme and object of the Institution over which we have the honor to preside, or of proffering or maintaining opinions on educational measures. We consider ourselves as servants at the disposal of Government, appointed to carry out certain prescribed duties, on certain principles plainly laid down for our guidance. These objects and these principles (independently of any ulterior measures directed to the elementary education of the masses) we regard as aiming at the superior education of the higher classes of the Native community, or of others who may

seek instruction, in the Seminary under our charge in order to qualify them, in proportion to their attainments, for higher stations in public or professional or social life, than have hitherto attracted, if indeed they have been open to, Native competition. We are fully aware, as the Natives must also be, that, without such an education, which it is the policy of this Institution and of those of a similar character founded in the other Presidencies to supply, such aspirations for advancement in life must be hopeless. And we equally feel that no material amelioration of the condition of the people at large in this country can be effected through other and less adequate means. But, although we consider these sentiments to be such as are in unison with those of the Government which selected us for the performance of the duties we cordially engaged in, and that they are those which we understand Government and the Honorable Court of Directors to have expressly incorporated in their instructions—yet we do not assume to indicate any wishes or suggestions of our own as most fit to be carried out; but refer ourselves altogether to the commands of Government—with a desire to render any service in our power towards the promotion of its educational objects.

We have awarded the Elphinstone Prize to M. Sevagooroo for his English Essay on the subject quoted in a preceding paragraph. We had no opportunity on the occasion of the last report of mentioning the name of the successful candidate for Pacheappah's Vernacular Prize—as two Essays in Tamil were of such equal merit that much difficulty arose in the selection. In the result the same prize was given to each. One of these Expositions has since been published. The sale has been large and it is likely to become a standard work. The subject is the discovery of America by Columbus, taken from Robertson's History. The names of these two worthy competitors are P. Vejiarunga Moodely and M. Seevagooroo. The first was a Proficient of last year and the last is a Proficient of the present year. The Exposition published is that of P. Vejiarunga Moodely.

We have awarded Pacheappah's Vernacular Exposition Prize this year to A. Streenevassa Row.

In our Appendix will be found a tabular statement of the scheme of studies pursued during the last year—copious specimens of the exercises of the most distinguished scholars —the Reports of the Public Examiners—the Rules for Government Scholarships, and for Lord Elphinstone's Endowment, and also for Pacheappah's Endowments—likewise an account of the last year's receipts and disbursements.

We have to recommend the following scholars to vacant Government Scholarships, who have been elected according to the prescribed rules.

C. Teeroovengadum,
T. Sakaujee Row,
T. Mootoosawmy,
} To Scholarships of the 1st Class.

T. Ramachender Row,
E. K. Williams,
S. Vilvanathum,
} To Scholarships of the 2d Class.

T. Jeyaram,
Y. Alagasingerry.
} To Scholarships of the 3d Class.

To the following Scholars have been awarded Prizes for distinguished merit.

In English Studies.

C. Teeroovengadum,	- - -	4th Class,	2d Rank.
T. Mootoosawmy,	- - - -	do.	1st do.
M. Rajaruthnum,	- - - -	3d do.	2d do.
E. K. Williams,	- - - -	do.	1st do.
R. Vencatasawmy,	- - - -	2d do.	2d do.
M. Colundavaloo,	- - - -	do.	1st do.
G. Vencatarungum,	- - - -	1st do.	2d do.
J. A. L'Fleur,	- - - -	do.	1st do.
C. Mootoosawmy,	- - - -	Preparatory Class.	

In Writing.

V. Rajagopaul, - - - - 4th Class, 1st Rank.

In Vernacular Studies.

TAMIL.

T. Rungasawmy,	4th	Class,	2d	Rank.
M. Vilvanathum,	3d	do.	2d	do.
T. Coopoosawmy,	2d	do.	2d	do.
C. Teroovengadum,	4th	do.	1st	do.

TELUGU.

C. Coopoosawmy,	4th	Class.
A. Dique,	2nd	do.
T. Sakaujee Row,	4th	do.

MAHRATTA.

T. Ramachunder Row,	4th	Class.
G. Sashachellum,	4th	do.

We have to express our continued and high satisfaction with the Head Master, the second Master and the Tutors generally. The institution has experienced a real loss in the retirement of their second Tutor Mr. H. Bowers; and they desire to record in this Report the sentiments which they have addressed to this Gentleman on the occasion in the following terms:

"*To*

"H. BOWERS, ESQ.

"SIR,

"The Head Master of the High School having intimated. "to the President and Governors of the Madras University "that it is your intention to resign your appointment as 2d "Tutor of the School from the 31st Instant, the Board have "directed me to express to you their regret at losing your "services in the institution under their charge, which they "cannot permit you to quit without placing on record the "high sense they entertain of your qualifications as a teach- "er, and of the zeal and regularity with which you have "conducted the duties assigned to you during the nine years "that you have been connected with the school."

" Your qualifications as a teacher the Board consider to be " of a superior order, and to have been attended with the " most successful result."

" I have the honor to be,
Sir,
" Your most obedient Servant,
(Signed) A. J. ARBUTHNOT,
Secretary."

MADRAS UNIVERSITY,
21*st January*, 1852.

The Board have unanimously elected Mr. Dutt, a Native of Calcutta, educated at the Hindu College, and subsequently at Bishop's College, to supply his place. This gentleman's attainments, as well in classical as in English literature, are of a distinguished quality—and although a young man he has already had considerable experience in Tuition.

We have, in conclusion, to add the expression of our thankful obligations to Dr. Mayer, Messrs. J. B. Norton, E. Salmon and A. J. Arbuthnot, who have given their voluntary assistance as Public Examiners at the last Annual Examination. And we offer our acknowledgments of the service of the other Public Examiners, Messrs. C. P. Brown, W. H. Bayley and Major Crisp, the Government Translators, who attended at the requisition of Government.

We have the honor to be,
Right Honorable Sir,
Your most obedient Servants,

(Signed) GEORGE NORTON, *President*,
„ JAS. OUCHTERLONY,
„ JOHN BRUCE NORTON.

APPENDIX.

Scheme of Studies pursued by the Scholars of the High School of the Madras University, during the year 1851.

English Department.

Subjects.	*Books*	*Portions read during the year.*	*Portions for examination*
	FOURTH CLASS, THIRD RANK		
Philosophy of History,	Smyth's Lectures on Modern History, Vol II, - - -	Lectures XXIX.—XXXVI, - -	The whole.
English Literature, -	Shakspeare's Dramas,	Henry VIII, - -	The whole.
Mental Philosophy, -	Abercrombie on the Intellectual Powers, -	Pages 1—267, - -	The whole
Astronomy,	Herschel's Astronomy and the Master's Note Book, - -	Chapters. I—IX, together with Mathematical demonstrations of the principal propositions, - -	The whole.
Spherical Trigonometry,	Snowball's Spherical Trigonometry,	The first four Chapters, and Articles 60, 61, 62, 73, and 74 in Chapter V, - - -	The whole
English Composition, ...	....	....	....
	N B —Those Scholars of the 4th Class that offered themselves as Candidates for Proficients' degrees were required to pass an additional examination in some of their previous studies		
	FOURTH CLASS, SECOND RANK.		
Modern History, - -	Russell's History of Modern Europe Vol. II	Part I, Letters 67—77, and Part II., Letters 11 and 19, - -	The whole.
Poetry, -	Calcutta Poetical Reader, No IV. - -	Chapter I. Lesson 4, Chapter II. Lessons 12, 15, and 18, Chapter III. Lessons 1, and 2, Chapter IV Lesson 3, Chapter VI, Lessons 12 and 13, and Chapter VII, Lessons 5 and 6, - - -	The whole
Political Economy, - -	Marcet's Conversations on Political Economy,	Conversations 1—17,—	The whole.
Chemistry, -	Marcet's Conversations on Chemistry, -	Vol I, omitting conversation 5, and conversations 12—18 of Vol II., - - -	The whole

Subjects.	*Books.*	*Portions read during the year.*	*Portions for examination.*
Mechanics, -	Whewell's Mechanical Euclid, - - -	Statics, - - -	The whole.
Spherical Trigonometry, -	Snowball's Spherical Trigonometry, -	The first four Chapters, and Articles 60, 61, 62, 73 and 74 in Chap. V.	The whole.
English Composition.. ..	....	.....	....
	Fourth Class, First Rank.		
Modern History, - -	Russell's Modern Europe Vol. I., - - -	Pages 1—250, - -	The whole.
Poetry, - -	Dodd's Beauties of Shakspeare, - -	Henry IV. V. VI. and Richard III., -	Henry IV. V. and VI.
Geometry, -	Williams' Symbolical Euclid, - - -	Books VI. XI. to prop. 21,	The whole.
Algebra, - -	Pinnock's Catechism of Algebra and Kelland's Algebra, - -	The principal parts, -	The principal parts.
Trigonometry,	Snowball's Trigonometry, - - -	Pages 1—65, 97—120 in Plane Trigonometry; and pages 1—34 and 51—65 in Spherical Trigonometry, -	The whole.
Natural Philosophy, -	Whewell's Mechanical Euclid, - - -	Statics, - - -	The whole.
English Composition,....	.....	.....	.....
	Third Class, Upper Rank.		
Political Government, -	Norton's Rudimentals,	Pages 1—255, - -	Pages 1—196.
History, - -	Goldsmith's History of England, - - -	Pages 218—390, - -	The whole.
Geography, -	Indian Geography and History by Symonds,	Beloochistan to Bhootan in particular; and the whole generally, -	The whole.
Geography, -	Goldsmith's Grammar of Geography, -	Europe and the Outlines of Geography generally, - - -	— The whole.
Chronology, -	Symonds' Chronology of India and Europe, -	To the end of the 18th Century, - - -	The whole.
Poetry, - -	Calcutta Poetical Reader, No. III., - -	Lessons 17 and 18 of Chap. I.; 11 and 12 of Chap. II.; 14 and 47 of Chap. III.; 4 and 12 of Chap. IV.; and 15 of Chap. V., - -	The whole.
Grammar, -	Murray's large Grammar	The Appendix, - -	The whole.

Subjects	*Books*	*Portions read during the year*	*Portions for examination.*
Use of the Globe	Terrestrial Globe, -	12 Problems, - -	The whole.
Arithmetic -	Bonnycastle's Arithmetic, - - -	The whole generally, -	The whole
Geometry, -	Williams' Symbolical Euclid, - - -	Books III. IV. and VI,	The whole.
Algebra, - -	Pinnock's Catechism of Algebra, - -	To the end of Simple Equations, - -	The whole
Natural Philosophy, - -	Introduction to Natural Philosophy, - -	Elements of Mechanics and Astronomy, -	Astronomy.
English Composition, -	....	. . . . .	....

THIRD CLASS, LOWER RANK

History, - -	Goldsmith's History of England, - -	Pages 1—228, -	Pages 41—228.
Geography, -	Symonds' Geography and History of India,	Pages 15—168, - -	The whole
	Guy's ditto, - -	From the beginning to the end of Ireland, and the Outlines of Geography generally, -	The whole
Miscellaneous Reading,	Blair's Class Book, -	Select Pieces, - -	Lessons for the 6th, 7th, 14th, 26th, 27th, 28th, of July and 6th, 11th, 15th, 24th of September
Poetry, - -	Calcutta Poetical Reader, No. III., - -	Pages 13—27 omitting the 12th and 13th Lessons,	Lessons 8—11 Chap 1.
English Grammar, - -	Murray's large Grammar, - - -	The whole of Syntax, -	The whole
Arithmetic, -	Bonnycastle's Arithmetic, - - - -	Simple and Compound Interest, Discount, Equation of Payments, and the Extraction of Square and Cube Roots, - -	The whole.
Geometry, -	Williams' Euclid, -	I and II Books, -	The whole
Algebra, - -	Pinnock's Catechism of Algebra, - -	To the end of Evolution,	The whole.
Natural Philosophy, - -	Introduction to Natural Philosophy, - -	Elements of Mechanics, - - - Excepting from page 30—37, - -	.....

SECOND CLASS, UPPER RANK

Roman History,	Goldsmith's History of Rome, - -	Chapters 17—23, - -	The whole
Poetry, - -	Gay's Fables, - -	Part II Fables 1—5, -	Fables 1 and 5.
Geography, -	Guy's Geography, -	Europe, -	The whole
Grammar, -	Murray's Abridgment, -	The whole, - -	The whole.
Spelling, -	Carpenter's Spelling Book, - - -	Pages 86—104, -	The whole

Subjects	*Books.*	*Portions read during the year*	*Portions for examination.*
Arithmetic,	Bonnycastle's Arithmetic,	Vulgar and Decimal Fractions, Circulating Decimals and Duodecimals,	The whole
	Second Class, Lower Rank		
Roman History,	Goldsmith's History of Rome,	Chapter 1—17,	The whole.
Poetry,	Gay's Fables,	Part I Fables 5—20,	Fables, 6, 16 and 17.
Geography,	Hogarth's Exercises,	The whole,	The whole.
Grammar,	Murray's Abridged Grammar,	The whole,	The whole
Spelling,	Carpenter's Spelling Book,	Pages 78—91,	The whole.
Arithmetic,	From the Master,	From Reduction in Integers to Simple and Compound Proportion in Vulgar Fractions,	The whole.
	First Class, Upper Rank.		
Reading,	Goldsmith's Natural History,	Chapters 15—34,	Chapters 15—18 and 17—29
Poetry,	Gay's Fables,	Fables 35—43,	Fables 35, 37 and 43.
Geography,	Hogarth's Outlines of Geography,	The whole,	The whole
Grammar,	Murray's Abridged Grammar,	The whole,	The whole
Spelling,	Carpenter's Spelling Book,	From Letter "O" page 40 to letters V and W Page 53,	The whole
Arithmetic,	From the Master,	The First four Rules in Vulgar Fractions,	The whole
	First Class, Lower Rank		
Reading,	Goldsmith's Natural History,	Pages 6—98,	The whole.
Geography,	Hogarth's Outlines of Geography,	Europe, Asia, Africa and America,	Asia and America.
Grammar,	Murray's Abridged Grammar,	The whole,	The whole.
Spelling,	Carpenter's Spelling Book,	From pages 26—38,	The whole.
Arithmetic,	From the Master,	Simple and Compound Rules,	The whole.
	Preparatory Class		
Reading,	Æsop's Fables,	From Fable 1—100,	The whole
Geography,	Clift's Geography,	Europe, Asia, Africa, and America,	Europe and Asia
Grammar,	The Elements of English Grammar,	Orthography and Etymology,	Orthography & Etymology
Arithmetic,	From the Master,	The four Simple Rules,	The whole

Vernacular Department.

Subjects.	*Books.*	*Portions read during the year.*	*Portions for examination.*
	Tamil.		
	4TH CLASS, UPPER RANK.		
Grammar,	Nunnool,	Venyeal and Yedychol-leal (25) pages,	The whole.
Poetry,	Theroo Kural,	Chapters 51—65,	The whole.
Hindoo Law,	Smiroothi Chundrika,	Pages 120—157,	The whole.
Tales,	Punchatuntree,	Part 5th,	The whole.
	4TH CLASS, LOWER RANK.		
Grammar,	Nunnool,	Venyeal,	The whole.
Poetry,	Theroo Kural,	Chapters 25—37,	The whole.
	3D CLASS, UPPER RANK.		
Grammar,	Catechism of Tamil Grammar by Thondavaroya Moodelliar,	Pages 225—274,	The whole.
Fables and Stories,	Robertson's Selections,	Pages 51—100,	The whole.
	3D CLASS, LOWER RANK.		
Grammar,	Catechism of Tamil Grammar by Thondavaroya Moodelliar,	Pages 1—83,	The whole.
Fables and Stories,	Robertson's Selections,	Pages 1—30,	The whole.
	2D CLASS, UPPER RANK.		
Grammar,	Abridgment of Grammar by Mahalingiah,	Pages 34—80,	The whole.
Reading,	Nitisaravakuyum,	The whole,	The whole.
Tales,	Punchatuntree,	Parts 1st and 2d,	The whole.
	2D CLASS, LOWER RANK.		
Grammar,	Abridgment of Grammar by Mahalingiah,	Pages 34—58,	The whole.
MoralSentences	Nitisaravakuyum,	Pages 1—30,	The whole.
	1ST CLASS, UPPER RANK.		
Grammar,	Abridgment of Grammar by Mahalingiah,	Pages 14—45,	The whole.
Fables,	Cadamunjaree,	The whole,	The whole.
	1ST CLASS, LOWER RANK.		
Grammar,	Abridgment of Grammar by Rhenius,	Pages 1—23,	The whole.
Fables,	Cadamunjaree,	Pages 1—30,	The whole.
	Teloogoo.		
	4TH CLASS.		
Grammar,	Gooroomoorthy's Grammar,	The whole,	The whole.
Poetry,	Manu Charitra,	The whole of Part II., & 118 Verses in Part III.,	The whole.
Glossary of Synonymous words,	Andranama Sungrahum,	The whole,	Parts 2 and 3.

Subjects.	*Books.*	*Portions read during the year.*	*Portions for examination.*
	3D CLASS.		
Grammar,	Gooroomoorthy's Grammar,	The whole,	From page 73 to the end.
Fables,	A Translation of Arabian Nights' Entertainments by Ramakistna Sastry,	The whole of the 1st Vol.,	Pages 1—300.
	2D CLASS.		
Grammar,	Gooroomoorthy's Grammar,	Pages 1—49,	Pages 25—47.
	Campbell's Grammar,	Pages 23—146,	Pages 91—146.
Tales,	Punchatuntree,	From page 59 to the end,	The whole.
	1ST CLASS UPPER RANK.		
Tales,	Vikramarka,	Pages 1—40,	Pages 1—20.
Exercises on the English Irregular Verbs,	Brown's translation of the Exercises on the English Irregular Verbs,	Pages 1—50,	Pages 1—25.
	1ST CLASS LOWER RANK.		
Balasiksha,	Balasiksha,	Pages 1—16 and pages 71—75,	The whole.
	Mahratta.		
	4TH CLASS.		
Grammar,	Balavyacarnum,	The whole,	The whole.
History,	Grant Duff's Mahratta History,	Chapters I.—X,	Chapters V. and VI.
Berquin's Children's Friend,	Balamithra,	Pages 1—240 Vol. I,	Pages 200—240.
	3D CLASS.		
Grammar,	Balavyacarnum,	The whole,	The whole.
History,	Bal Gungadra Sastry's Abridged History of British India,	Chapters 1—11,	Chapters 9—11.
Berquin's Children's Friend,	Balamithra,	Pages 1—235 Vol. II,	Pages 200—235.
	2D CLASS.		
History,	Catechism of Mahratta History,	The whole,	Pages 33—48.
Moral Tales,	Neetedurpun,	Pages 1—84,	Pages 64—84.
	1ST CLASS.		
Spelling,	Liphidara,	Pages 1—21,	Pages 16—21.
Moral Tales,	Botha Catha,	Pages 1—40,	Pages 1—13.

N B The senior Scholars were exercised in translating from English into the Vernaculars, and vice versâ, on Wednesdays and Saturdays.

Questions proposed to the Scholars of the 3rd, 2nd, and 1st Ranks of the 4th Class.

Smyth's Lectures.

1. State succinctly those causes of the American war which may be considered discreditable to England.

2. Give a short account of the facts of the American war, especially of the events of the year 1776-7-8 with their dates.

3. Give such arguments as you may remember from Mr. Grenville's speech in favour of the taxation of America.

4. The same from the speech of Mr. Pitt on the other side.

5. Who were the principal pamphleteers on either side of the question? What side did Dr. Johnson and Gibbon take? May we learn any lesson from this, and what?

6. What are the two great political lessons to be drawn from the American war?

7. State the difficulties with which Washington had to contend? To what do you principally attribute them? Explain how such a cause could affect them.

8. Draw the character of Washington?

Shakspeare.

1. What do you conceive to be the object of dramatic poetry as distinct from any other?

2. How can you reconcile the construction of Historical Dramas with the theory that the Drama is an imitative art?

3. Can you trace any distinct object in the play of Henry VIII. —if so what?

4. Do you observe any differences in the language and style of Henry VIII. from Shakspeare's other plays?

5. Sketch briefly the characters of Wolsey and Queen Katherine as drawn by Shakspeare.

6. What do you mean by the term "pathetic?" give instances of it from this play.

7. Describe the principle of the method by which the sun's parallax is determined. What is the use of the sun's parallax?

8. Explain the solar and lunar ecliptic limits, and find them by a rough approximation.

9. Find an expression for the phase of a planet, supposing it to move in the plane of the ecliptic.

10. If the maximum elongation of Venus were 30°, and her orbit and that of the earth were circles in the same plane, what would be the ratio between the radii of the two orbits?

11. State Kepler's three laws and mention the conclusions deduced from them by Newton.

12. Explain roughly the way in which the new planet Neptune was discovered.

Spherical Trigonometry.

1. How do degrees vary on circles possessing a common pole?

2. Supposing A, B, C, to be the angles of a spherical triangle, prove that $\pi > A + B - C$ and $< A + B + C$.

3. Granting that $\cos. a = \frac{\cos A + \cos B. \cos C}{\sin. B. \sin C}$ prove that $\cos. A = \frac{\cos a - \cos b \cos c.}{\sin. b \sin c.}$

and $\cos. a \sin. b = \sin a \cos b. \cos C + \sin c. \cos A.$

4. Find $\sin \frac{a}{2}$ in terms of A, B, and C.

5. When does ambiguity attend the solution of a right angled triangle?

6. State the circular parts for a quadrantal triangle.

7. A circle is inscribed in a spherical triangle, find its radius in terms of the sides of the triangle.

8. The angles of a spherical triangle are 62° 4′, 88° 6′, and 30° 2′, what is its area in square miles, supposing the earth's radius to be 4000 miles?

9. Of what quantities does Spherical Trigonometry trace the relations? Why do we introduce the idea of a sphere?

Russell's Modern Europe.

1. Describe the state of Scotland at the time of *Mary's* accession to the throne and enumerate the principal events which marked her reign.

2. Give the date of *Mary's* execution, and state the charges upon which she was tried.

3. Name the leaders of the religious parties into which France was divided during the reigns of Charles IX., Henry III., and Henry IV., the battles fought in the course of the civil war, the foreign powers by which the respective parties were aided, and the extent of assistance rendered by them respectively.

4. Sketch the origin and progress of the republic of the United Provinces. State the date of the Union, and describe briefly the course of the contest maintained by the republic in support of its independence.

5. Describe the character of Elizabeth, and the leading features of her foreign and domestic policy. Who were her principal ministers?

6. Explain how James VI. of Scotland became entitled to the succession to the English throne.

7. State the circumstances which led to the commencement of the Thirty Years' war, and the causes which induced Gustavus Adolphus to engage in it.

8. What part did France take in the war? Show the inconsistency in Richelieu's treatment of his Protestant fellow-subjects, as contrasted with his policy towards the Protestant states of Germany.

8. Give a short account of each of the remarkable battles fought by Gustavus Adolphus during the war. What were the consequences of his death as regarded the issue of the war?

10. Describe the career of Wallenstein and the circumstances of his death.

11. Give the date of the Peace of Prague, its terms, and its immediate results.

12. State briefly the causes which led to the Peace of Westphalia and give a short outline of its principal provisions.

13. Give the date of the formation of the Dutch East India Company, and state the circumstances in connexion with their Eastern trade which led to its establishment.

14. In what way did the Reformation tend to the cultivation of Literature and Science?

Political Economy.

1. Define Wealth, and show that the institution of property in land is essential to the production of wealth.

2. Show by reference to history that the insecurity of property tends to make a people poor, and to degrade it in the scale of civilization.

3. Explain the causes which render Barter necessary to civilization, and its tendency to produce a division of labour.

4. Give a definition of Capital generally. Distinguish between fixed and circulating Capital. Give instances to illustrate and explain the operation of it in the production of wealth.

5. Explain what is meant by Immaterial Capital, and the manner in which it conduces to the production of wealth.

6. By what general principle is the rate of Wages regulated? State the several causes which tend to raise it. Explain the effect of a scarcity of provisions on Wages.

7. State the different results laid down by Mr. Malthus as likely to follow from high wages under different circumstances; specifying the different circumstances from which these different results are likely to ensue.

8. Explain value. In what sense or to what extent can there be a standard or a measure of value?

9. By what is the Market Price of a commodity regulated? Show that the standard of value, adverted to in the preceding question, can only be temporarily affected by the adventitious circumstances which regulate the market Price of a commodity.

10. Explain the origin of the Rent of Land.

11. What classes of persons are included under the denomination of *Unproductive Labourers*? Show that many of these so called *Unproductive Labourers* are indirectly necessary to the production of wealth.

12. Explain the origin and use of money.

Chemistry.

1. Can you give any definition of the term Chemistry? in other words, state what you understand by it.

2. Does Chemical action take place at appreciable distances?

3. Of the three forms of aggregation in which matter is found, state which is the most favorable to Chemical action.

4. State, why forms of aggregation are not favorable to Chemical action.

5. What are the Agencies, independent of the form of aggregation, which chiefly influence and determine Chemical action?

6. Have these Agencies any material form or density appreciable by any means at our disposal?

7. Look around and state whether the substances you see are simple or compound.

8. State precisely the meaning you attach to these terms.

9. Are the terms simple and elementary, when used in works on Chemistry, synonymous?

10. Are the Elements of the Ancients such as are now termed Elements?

11. How do you know that the terms given by the ancients to Air, Water, &c., are incorrect?

12. Can you give me a List of the Bodies termed simple? or if you cannot remember them, take the Metals as a class and enumerate the Metalloids.

13. Do the Metalloids enter into combination among themselves, and if so, give examples.

14. State what is the general character of these compounds, particularly with Oxygen.

15. Do the metalloids combine with metals? and if so give examples, and state what is their general character.

16. How do you define an Acid?

17. State what are the characteristics of a Base.

18. If a base and Acid are combined, what do they form?

19. Are there any Substances which are not Acid, but yet which when combined with Metals, form salts? if so, give examples of these salts.

20. Can you give me an account of the properties of Oxygen? name the sources from which it is procured, the methods of proceeding in order to procure it.

21. State what you know concerning Hydrogen, mention the source from which it is obtained, and the method of proceeding.

22. State what will be the result if two measures of H. and one of O. are mixed together, and the mixture brought in contact with flame.

23. State the nature of the compound thus produced, taking notice of the following points—effects of increased and decreased temperature—solvent properties relative to the Atmosphere.

24. What is the effect of the Sun's rays on the Ocean, Lakes, Rivers, &c.?

25. To what do you attribute mist, rain, hail and snow?

26. To what is the dew found on leaves and other surfaces attributable?

27. What do you know of Nitrogen, has it powerful Affinities such as those displayed by Oxygen and Hydrogen?

28. How do you obtain it and from what sources?

29. What are the principal compounds of Nitrogen?

30. What is the character of most of its Oxygen compounds?

31. What is the character of its compounds with Hydrogen?

32. What is Ammonia commonly termed and Why?

33. What is the most abundant source of Nitrogen?

34. What is the composition of Atmospheric Air?

35. Is it a chemical compound or a mixture?

36. What are the proportions by Volume of Nitrogen and Oxygen found in the Air?

37. If a strong Acid be presented to two bases, why does it combine with one in preference to the other?

38. What is the difference between Chemical Attraction and Cohesive Attraction?

39. What do you mean by Capillary Attraction.

40. Can you give any instance in which this force acts on a large surface?

41. Do you know what part of the Atmosphere is appropriated by Animals, during inspiration, and what it is, that is got rid of during expiration?

42. What proofs can you adduce in support of the Statements you have made?

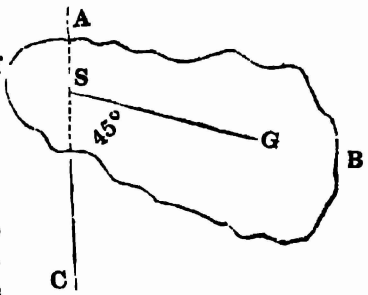
Mechanics.

1. Describe the object of this science, and name its principal applications.

2. Explain the meaning of virtual velocity; and show that, when a straight lever is kept in equilibrium, the power and weight are inversely as their virtual velocities.

3. A triangle is formed of three rods whose lengths are 5 feet, 5 feet and 4 feet; supposing the rods to be homogeneous and of uniform thickness, find their centre of gravity.

4. A B is a heavy body revolving about an axis passing through S and perpendicular to the plane of the paper, G is the centre of gravity lying in the plane of the paper, and A S C a vertical through S in the same plane; supposing the weight of the body to be 10 lbs., the distance S G to be 2 feet, and the ∠ G S C to be 45°, find the moment tending to produce rotation and the force which acts as a strain on S.



5. The ∠ of an inclined plane is 30°, and a body on it weighing 12lbs. is supported by a force P acting upwards at an ∠ of 15° to the surface of the plane. Find P.

6. Describe clearly the nature of the improved wheel and axle.

7. In the system of pulleys in which each pulley hangs by a separate string, supposing P to be one pound, the weight of each pulley one ounce, and the number of moveable pulleys 5, find W.

8. Find the ratio between P and W for the screw.

9. Explain the action of a rudder.

10. What is the use of the long pole which a tight rope dancer carries in his hands?

Russell's Modern History.

1. What sort of Government prevailed among the barbarous nations that overthrew the Roman empire?

2. Mention what you know of the conquest of Spain by the Saracens.

3. Describe the state of Italy under Charlemagne.

4. How did the Normans come to possess a portion of France?

5. Give your opinions of chivalry and monachism.

6. What parties received the names of Guelphs and Ghibelins? Give the origin of the names.

7. What gave rise to the former ceremony called the espousal of the Adriatic by the doge of Venice?

8. Describe the position of the Christian Church in Europe during the dark ages.

9. Mention briefly who the following individuals were. Urban II. Saint Bernard, Robert Guiscard, Tosti, Eudes, Wamba and Pelagius.

10. Give the dates of the following events. The evacuation of England by the Romans, the death of Charlemagne, the death of Alfred, the enactment of the Constitutions of Clarendon, and the first crusade.

11. Mention the events, in the period of Modern History that has come before you, which most influenced the progress of Europe, and explain the grounds of your views.

Plane Trigonometry.

1. Find the sine of 36°.

2. Cos A = 2, find cos. 4 A.

3. Prove that $\tan B = \frac{b.\ \sin\ C}{a - b \cos C}$

4. Find the area of a triangle in terms of its sides; and write down the area of the triangle whose sides are 12, 15, and 20 feet.

5. Prove the formula sin A = sin (36° + A) + sin (72°—A) —sin (36°—A)—sin (72° + A), and explain its use.

6. Find the square root of cos 4 A + $\sqrt{-1}$ sin 4 A.

7. Obtain formulæ for finding the distance between two visible but inaccessible objects in the same plane with an observer.

8. Compare the areas of regular dodecagons described in and about a circle.

9. Show that opposite readings of a graduated circle eliminate the error of centering.

10. Find the number of degrees in the arc whose length is equal to the radius.

English Poetry.

1. Paraphrase the following:

Clime of the unforgotten brave!
Whose land from plain to mountain-cave
Was freedom's home or glory's grave!
Shrine of the mighty, can it be
That this is all remains of thee?
Approach thou craven crouching slave:
Say, is not this Thermopylæ?

These waters blue that round you lave
O servile offspring of the free!
Pronounce what sea, what shore is this?
The gulf, the rock of Salamis!

2. To what country do the foregoing lines refer? Describe the geographical position of Thermopylæ and Salamis respectively, and state for what events they were famous. State briefly the change to which the Poet refers, in the condition of the nation alluded to, and its present political position.

3. "These waters blue that round you lave."

Is there any thing peculiar in the construction of this line, when taken with what immediately follows it? If so, explain the peculiarity.

4. Paraphrase—

Or let my lamp, at midnight hour,
Be seen in some high lonely tower,
Where I may oft outwatch the Bear,
With thrice great Hermes, or unsphere
The spirit of Plato, to unfold
What worlds, or what vast regions hold
The immortal mind, that hath forsook
Her mansion in this fleshy nook;
And of those demons that are found
In fire, air, flood or under ground,
Whose power hath a true consent
With planet or with element.
Sometimes let gorgeous Tragedy
In sceptered pall come sweeping by,
Presenting Thebes' or Pelops' line,
Or the tale of Troy divine;
Or what (though rare) of later age
Ennobled hath the buskined stage.
But O! sad virgin! that thy power
Might raise Musæus from his bower,
Or bid the soul of Orpheus sing
Such notes as, warbled to the string,
Drew iron tears down Pluto's cheek
And made hell grant what love did seek.

5. What is the allusion in the words "in sceptered pall?" Name any of the ancient dramas which are founded on the events referred to in the following lines:—

"Presenting Thebes' or Pelops' line,
Or the tale of Troy divine."

State briefly the stories alluded to.

6. "Or what (though rare) of later age
Ennobled hath the buskined stage."

What is the allusion here and what is the meaning and origin of the term "buskined," as applied to the stage?

7. "Drew iron tears down Pluto's cheek
And made hell grant what love did seek."

To what well-known story in ancient Mythology do these lines refer?

8. Explain the following passages and the historical allusions, where there are any.

"Wrapt in historic ardour."

"See Roman fire in Hampden's bosom swell,
And fate and freedom in the shaft of Tell."

"That friend of Nature, whose avenging hands
Shall burst the Lybian's adamantine bands."

"Not thirty tyrants now enforce the chain,
But every carle can lord it o'er thy land."

"The Niobe of nations! there she stands,
Childless and crownless, in her voiceless woe."

"While kings, in dusky darkness hid
Have left a nameless pyramid."

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9. Paraphrase the following:

Where cold obstruction's apathy
Appals the gazing mourner's heart,
As if to him it could impart
The doom he dreads, yet dwells upon.

10. When did Milton live? State the subjects of his principal Poems. Describe the object and aim of the L'Allegro and Il Penseroso. What circumstance in Milton's after-life would seem to belie the tone of mind in which these Poems were written?

Selected Answers of the Scholars in the 3rd, 2nd and 1st Ranks of the 4th Class.

Smyth's Lectures.

Q. 1. State succinctly those causes of the American war which may be considered discreditable to England.

A. 1. There are five causes which may be said to be discreditable to England.

First, an inattention to the great principles of political economy. This induced the English not to listen to the arguments of those that laid down from time to time the best projects for the augmentation of wealth not by taxes and taxgatherers, but by the interchange of commodities, and the encouragement of merchants and manufacturers who form the real revenue officers of the country.

Secondly, A blind selfishness in the mere matter of money. This influenced the people to support the ministers in their coercive measures, from an expectation of making their taxes lighter or at least from becoming heavier.

Thirdly, an overweening national pride. This caused the subjects to suppose that nothing could stand opposed to their pleasures, and that no nation could compete with their armies and fleets.

Fourthly, High principles of prerogative. This made them push too far the rights of authority without inquiring how far they were just, and enforcing laws without considering their legitimacy.

And fifthly, a vulgarity of thinking in political subjects. In consequence of this, the people paid no regard to the arguments of Burke and others who drew their conclusion from the philosophical principles of a general nature, but applauded the sentiments of thoughtless declaimers.

T. DURMAROYEN.

Q. 2. Give a short account of the facts of the American war, especially of the events of the year 1776-7-8 with their dates.

A. 2. In the year 1764, Mr. Grenville proposed to tax America towards defraying the expense which Great Britain incurred in defending the colonies from the late incursions of the French; and in the following year he carried what was called the Stamp Act. When this intelligence reached America it created a great sensa-

tion among the colonies. Grenville, however, soon went out of office and was succeeded by Rockingham. This minister very prudently repealed the dangerous Stamp Act; but at the same time passed a declaratory bill asserting the right of the parliament to bind the colonies in all cases whatsover. When the colonies were informed of this, their joy knew no bounds. They considered the declaratory Act as a mere salvo to the wounded pride of the English nation, and thought it would remain a dead letter. But they were sadly disappointed in this; for Charles Townshend who succeeded Rockingham, revived the idea of taxing the colonies and imposed certain duties, on glass, painters colours, tea, and some other articles. The agitation which was produced among the colonies baffles all description. They drew up remonstrances to the Crown couched in a strong language but full of allegiance. These remonstrances were received by the Crown with a disgraceful indifference and were never properly answered. In the year 1770 Lord North came into office and repealed all the duties except that on tea in order to evidence the right of taxing the colonies North sadly miscalculated the spirit of the Americans. They objected to the principle and not to the amount of the tax. The Americans justly thought that the tax on tea was an inlet to further taxes. They therefore entered into non-importation association, and when the British ships laiden with tea arrived at the harbour of Boston, some of the Bostonians disguised as the Indians threw the tea chests overboard. This and some other Acts of outrage roused the indignation of the mother country. The ministry therefore had recourse to many unjustifiable measures. The parliament passed three several Acts for shutting up the port of Boston, for altering the constitution of Massachusetts and for removing to England the capital offenders for trial. Troops were sent from England to punish the colonies and the hostilities were actually commenced in 1775 at Lexington, the affair at Lexington was followed by that at Bunkershill in the same year. In the year 1776 the Congress met and declared themselves independent. This is the most important of all the measures taken by the Americans. In the same year they sent addresses to the people of Great Britain and to the Canadians vindicating their conduct and exposing the unconstitutional measures of the mother country. In 1777 Burgoyenne with a royal army was captured and this success of the Americans, induced the French to espouse the cause of the Americans in 1778 and amply assisted them

with money and every thing necessary to keep up a vigorous opposition to England. Another royal army was captured under Lord Cornwallis in 1781. From this time England was obliged to give up all idea of conquering America. In 1783 she concluded a peace in which she was forced to acknowledge the independence of the colonies.

M. Sevagooroo.

Q. 3. Give such arguments as you may remember from Mr. Grenville's speech in favour of the taxation of America.

A. 3. Mr. Grenville declared that there is no difference between internal and external taxation that the right of sovereignty belonged to Great Britain and the right of taxation was included in the right of sovereignty, that the palatinate of Chester and the Bishopric of Durham and others are not represented but yet taxed, that America was not emancipated, that America is indebted for many bounties to Britain and that the faction in the house supported the rebellion in America.

Q. 4. The same from the speech of Mr. Pitt on the other side.

A. 4. In reply to the speech of Mr. Grenville, Mr. Pitt declared that there is a difference between internal and external taxes, the former having for its the real raising of a revenue, and the latter, the regulation of commerce, and thereby getting an indirect revenue. He also asserted and proved that Wales and Chester, &c. are really represented in different capacities, that the Americans were never made slaves, that Britain derives immense advantage from the American commerce, and that the English constitution prohibits all such unjust taxes. In short he said, he rejoiced that America had resisted.

Teroomala Rao.

Q. 5. Who were the principal pamphleteers on either side of the question? What side did Dr. Johnson and Gibbon take? May we learn any lesson from this, and what?

A. 5. The principal pamphleteers on the side of taxation, were Dean Tucker, Dr. Johnson, and on the opposite side were Robinson and Burke. Dr. Johnson and Gibbon took their side in favor of taxation. The lesson we learn from this, is that however learned a person may be, it is possible for him to be blindfolded, and take the wrong view of a subject.

T. Durmaroyen.

Q. 7. State the difficulties with which Washington had to contend. To what do you principally attribute them? Explain how such a cause could affect them.

A. 7. The American Congress had the power only to recommend and not to enforce taxes, consequently Washington was unable to provide the army with the necessary supplies, such as gunpowder, arms, &c. The distress to which the army was reduced was so great that a Captain's pay was not sufficient to buy him shoes. Washington was unable to resort to the expedient of quartering his army upon the territories of the enemy. Indeed, the American affairs were at one time in a very desperate condition. But happily the superior talents of Washington prevented the occurrence of any dangerous calamity to the destruction of the liberties of the infant American republic. All these difficulties which Washington had to encounter must principally be attributed to the weakness of the executive government in America. The Congress issued paper money which was current for about two years, after which the paper began to depreciate, till at last the paper was worth nothing. The evil effects flowing from this depreciation of paper money were experienced by the American people and threatened to endanger the liberties of America.

TEROOMALA RAO.

Q. 8. Draw the character of Washington?

A. 8. Washington seems to have shared very little of our common frailties. He was a man of lofty courage, of incorruptible patriotism and integrity. All his passions were absorbed in the love of his country. Notwithstanding the innumerable temptations to which he was exposed, he was able to rise entirely above the intoxicating effects of sovereign rule. The difficulties which presented themselves would have appeared quite insurmountable to an ordinary mind. Washington by his patience, perseverance, and indefatiguable industry, overcame them, and brought the cause of his country to a triumphant issue. These difficulties, says one of his biographer, seem only to have furnished fuel for the flame of his patriotic zeal. His judgment was solid; he adopted no measure without putting it in different lights. As a general he was bold without being rash. He is compared to Fabius in the system of his warfare. His character is not stained by any unworthy passions. His heavenly mould was incapable of any stain. To conclude, he was an honor to his country, to his age and his species.

M. SEVAGOOROO.

Shakspeare's Henry VIII.

Q. 1. What do you conceive to be the object of dramatic poetry as distinct from any other?

A. 1. The object of dramatic poetry is to draw out clearly, and to explain the variety of forms, and shapes, which human nature assumes under different circumstances. By means of a drama, the poet impresses upon the minds of the people the faults and follies that belong to a particular period, and tells them to avoid these. He also brings forward the virtues, and the noble qualities, that are peculiar to an age, and shows the advantages, which a nation or an individual, derived from these. He indirectly informs the readers of the manners and customs, and the political state of a people at a particular time, and thus affords instruction in a variety of ways.

P. SOONDARUM.

Q. 2. How can you reconcile the construction of Historical Dramas with the theory that the Drama is an imitative art?

A. 2. Dramas imitate nature and display the character of man, in all positions. Similarly historical dramas imitate and expose the faults and crimes as well as the good acts of great individuals distinguished in history. Consequently the only difference between them is that the personages and the circumstances in which they are situated, are real, and that the field for the exercise of dramatical genius is limited.

T. DURMAROYEN.

Q. 3. Can you trace any distinct object in the play of Henry VIII. —if so what?

A. 3. It is very difficult to trace any distinct object in the play of Henry VIII. Our poet's object seems, however, to have been to depict the spirit and genius of the time of Henry VIII., and to delineate its peculiar interests and tendencies. By his introductory scenes, he exposes the grandeur and magnificence of Henry's Court. The attempt of the nobles to maintain a strong political position independently of the Crown, as in feudal times, is now sunk into a mere rivalry with it in riches and magnificence and the power of the monarch is now apparently unlimited. The nobility, the clergy and the commons are entirely subservient to Henry. This change of things, the poet has beautifully depicted, by several significant scenes. By the relation in which Wolsey is made to stand to the

king and the state the poet shows, that the power of the Crown has outgrown even the ecclesiastical. It is only by double dealing and intrigue that Wolsey, is able to get an unlimited power in the kingdom. By the theological disputations on Henry's divorce, our poet means to intimate the approaching great reformation of religion. Lastly, by giving us the rise and fall of Wolsey, the poet warns us of the bitter fruits of criminal ambition. He conveys this important lesson by the following words which he puts into the mouth of Wolsey after his fall.

> "Cromwell I charge thee fling away ambition
> By that sin fell the angels.
> How can man the image of his maker
> Can hope to win by it."

M. Sevagooroo.

Q. 5. Sketch briefly the characters of Wolsey and Queen Katherine as drawn by Shakspeare.

A. 5. The characters of these two personages are sketched by our poet, with wonderful versimilitude and pathos. The genius of the poet in Henry VIII. "comes in and goes out" with these characters.

Shakspeare represents Wolsey in the first place as possessing an unbounded influence in the kingdom, and while he enjoyed the sunshine of prosperity, as a man of haughty and intriguing characters. But when he falls the poet entirely commands our sympathies with him. In the first place Shakspeare skilfully expresses Wolsey's power in the following words which he put into the mouth of Norfolk.

> Nor.——This imperious man (Wolsey) will work us all
> From princes into pages: all men's honor
> Lie in one lump before him
> To be fashioned in what pitch he pleases.

Wolsey's love of power was excessive,—it was constantly whetted and never cloyed by possession. He displayed the duplicity character in all his deeds. He was a consummate hyprocate. Although he ruled the kingdom virtually and made Henry only as his puppet, yet he professed an unbounded obedience to his sovereign's commands. He possessed a daring courage and an audaucity of purpose which shrank from no difficulties. For when he is accused of having levied an unlawful tax he says--

"If I am traduced by tongues which neither know my faculties nor person yet will be the chronicles of my doing let me say, it is the fate of place, and the rough brake which virtue must go through," &c. Now let us look at the favourable side of his picture. He was a munificient patron of learning Our poet says, "Ever witness for him those twins of learning he raised in you Oxford and Ipswich."

He was man of great political sagacity and wisdom. After he was "stripped of the trappings of his ambition" he became quite convinced of the uncertainty of all earthly things. His soliloquies after his fall are indeed the most exquisite and pathetic we can imagine. Above all in the words of our poet—

> "His overthrow heaped happiness upon him
> For then and not till then, he felt himself
> And found the blessedness of being little
> And to add greater honor to his age than
> Man could give him he died fearing God."

Catherine is represented by the poet, as an amiable, pious, and noble consort. Her "virtuous sorrows and distresses" excite on the one hand our warm sympathies with the unoffending Queen; and on the other a glow of just indignation against her hard hearted husband, who divorced her without any proper ground. The fortitude, the patience and self-possession which were apparent in the conduct of the Queen, raise her to our highest admiration. Who can for a moment abstain from desecrating and devoting to eternal damnation, her husband, after hearing her pathetic exclamation

> "Like the lily that was once the mistress of the field
> I will hang my head and perish."

M. Sevagooroo.

Q. 6. What do you mean by the term "pathetic?" give instances of it from this play.

A. 6. Pathetic signifies exciting pity or compassion. "When I came here before, I was Lord High Steward; but now poor Edward Bohun." "Oh, father abbot, an old man broken with the storms of state is come to lay his weary bones among ye; grant him a little earth out of charity." "Sir, I desire you do me right and justice. I have been your true and humble wife for upwards of

twenty years, and have borne many children by you," &c. These three passages are—

" full of pity and woe, and
such as draw the eye to flow."

D. TEAGIAH.

Q. 7. Explain the following passages :—

" Men might say,
" Till this time pomp was single, but now married
" To one above itself."

" What did this vanity,
" But minister communication of
" A most poor issue ?

He said " he would outgo
" His father, by as much as a performance
" Does an irresolute purpose."

" For those you make friends
" And give your hearts to, when they once perceive
" The least rub in your fortunes, fall away
" Like water from ye, never found again
" But where they mean to sink ye."

" To be her mistress' mistress! the Queen's Queen!
" This candle burns not clear ; 'tis I must snuff it."

A. 7. (1.) The grandeur exhibited at the interview was so great that an individual that saw it, would say that he had never seen even half as much as he now witnessed.

(2.) The interview that cost so much produced nothing important but ended in utter failure.

(3.) He would surpass his father in his actions by as much as the completion of an act exceeds the mere saying of it.

(4.) Those whom you love most will gradually desert you when they perceive the least sign of misfortune befalling you, and what is worse, they will join your enemies.

T. DURMAROYEN.

Q. 9. Paraphrase the following :

Q. Kath. " The subjects' grief
" Comes thro' commissions,' which compel from each
" The sixth part of his substance to be levied
" Without delay ; and the pretence for this

" Is nam'd your wars in France ; This makes bold mouths ;
" Tongues spit their duties out, and cold hearts freeze
" Allegiance in them ; their curses now
" Live where their prayers did ; and it's come to pass
" This tractable obedience is a slave
" To each incensed will—I would your highness
" Would give it quick consideration, for
" There is no primer business."

A. 9. The grievances of your subjects arise from certain commissions which have been sent against them in order to levy without any hinderance, the sixth part of each man's property, under the pretence of discharging the expenses of the war. This tax makes them cry out against the Government. Some of them have already renounced their duties to you; others are ready to throw off their allegiance; instead of praying for you they now curse you; and it happens now, that their obedience is entirely absorbed in their anger. I wish your highness would immediately take up the matter into your consideration, for there is no more important affair than this.

A. Streenevassa Row.

Q. 11. Can you gather from internal evidence in what reign this play was written ?—give your reasons.

A. 11. The Seventeen lines beginning with

" Nor does this peace sleep with her,"

seem to be clearly an interpolation, for if this passage be omitted, the whole proceeds in a continued tenor of prediction and the thread does not break. Consequently it may be supposed that the play was written in the reign of Elizabeth. There are, however, certain passages which go against this supposition. 1st. The one in which the phrase " aged princess" is introduced. 2d. The one in which the colonization of Virginia is alluded to, which supposes that the play must have been written in the time of James 1. To these must be added another consideration, viz., would Elizabeth like to see her father's character and some particulars connected with her mother, such as the love of Henry for Anne, introduced into the play ? This subject is one on which different opinions are held by different writers, but however by taking into consideration both internal and external evidences, it is generally agreed to that the first

supposition, viz., that the play was written in the time of Elizabeth, seems to be more probable.

T. TEROOMALA ROW.

Mental Philosophy.

Q. 1. What is the object of science? what of art? distinguish between physical and intellectual science, certain and uncertain sciences—give examples of each—what are the principal causes of uncertainty in the last?

A. 1. The object of science is to make a careful and extensive collection of facts, and events, and to ascertain the relations among them; and that of art is to bring together these ascertained relations and tendencies for the production of certain desired effects. Physical science investigates the laws and relations of material substances; and intellectual science has for its object, the investigation of the processes of the human mind, such as perception, memory, imagination and judgment. The certainty of a science depends upon the facility with which we can ascertain the relations of things, and this we are able to do in all physical sciences which may therefore be called certain. Again, there are other sciences, in which we experience a great difficulty in tracing effects to their true causes and causes to their effects. Chemistry, and Astronomy, may be mentioned as examples of certain sciences; we have only to recollect the accuracy with which the Astronomer calculates eclipses. Intellectual Science, Medicine and Political Economy may be mentioned as examples of uncertain sciences. The principal causes of uncertainty in these sciences, are, first the difficulty of tracing effects to their causes and causes to their true effects, and secondly, the impossibility of introducing any direct experiments by which the true relations may be established.

M. SEVAGOOROO.

Q. 3. To what three sources is all knowledge attributable? Why is it necessary to include the last of these three?

A. 3. The three sources to which all knowledge is attributable are sensation and perception, consciousness and reflection, and testimony. The knowledge which we ourselves acquire is but small. It can extend only to the place in which we are placed and to a fifty

or sixty years back. Most of our knowledge is acquired through the perceptions of other men. It is acquired for example from the traveller or the historian on the evidence of testimony. It becomes therefore necessary to include testimony under the sources of knowledge.

D. TEAGIAH.

Q. 4. Enumerate our chief intuitive principles of belief. Why are they called "First Truths?"

A. 4. The principal intuitive articles of belief are, First, a confidence in our own existence as sentient and thinking beings, and of mind as something distinct from the functions of the body. Second, a confidence in the evidence of our senses in regard to the existence of external things. Third, a confidence in our own mental processes. Fourth, a belief in personal identity as acquired by consciousness and memory or by a comparison of past mental perceptions with present feelings. Fifth, a belief that every event must have a cause and a cause adequate to the effect. Sixth and the last, a confidence in the uniformity of the operations of nature. These are called first truths, because they are the foundation of all reasoning and they themselves admit of no reasoning, and when we attempt to prove, we fall and plunge into absurd and sophistical speculations, which lead to no truth whatever. These first truths must be taken for our basis, for otherwise reasoning would be no better than building castles in air.

T. TEROOMALA ROW.

Q. 5. Collect the rules by which we estimate the credibility of Testimony. State the principal rules for the cultivation of memory.

A. 5. In estimating the credibility of Testimony we should be directed by the following considerations.

What statements does the author make as matters of fact. Has he had sufficient opportunity of ascertaining the facts and have we confidence in his veracity. Have we any reason to suspect that the author has any purposes to effect by the narration of his facts. If we are satisfied on all these points we should at once give credit to his Testimony.

M. SEVAGOOROO.

Q. 7. "A man is not responsible for his belief."—Prove or disprove this.

A. 7. That "man is not responsible for his belief," is a dogma,

when taken in the abstract may appear correct. But when we come to regulate our conduct practically by this, it is productive of consequences, the most detrimental to the interest of Society. According to this dangerous doctrine a man may frame certain rules according to his fancy and convenience for the regulation of his conduct, and then declare he is not responsible for his belief. This dogma, if encouraged, will throw mankind into inextricable confusion. Certainly we are responsible for the care with which we have procured information with regard to any point and for any unhealthy state of our moral feelings which might have influenced us in framing any system of rules either for the regulation of our own conduct or for directing the affairs of mankind at large.

M. SEVAGOOROO.

Q. 8. State the progressive steps to be pursued in the investigation of any specific subject. State the errors especially to be guarded against in each. Give instances.

A. 8. In the investigation of any specific subject, the progressive steps to be pursued are to collect a sufficient number of facts, to distinguish from the mass the relations among facts which are incidental from those which are uniform, to trace the relations of causation, and to deduce a general principle. In the first, we are liable to include facts which do not bear upon the subject, in the second, to take the relation to be incidental when uniform, from a limited number of facts, in the third to put the one for the cause of the other when both are the effects of some cause, and in the last to deduce from a partial examination a general fact which is not applicable to the individual cases which come under that general head.

For instance with regard to the law of gravitation, we first see that bodies fall to the earth, then find whether there are any exceptions, and lastly we conclude that the law is universal.

T. TEROOMALA ROW.

Q. 9. State the grounds on which the superiority of Mathematical reasoning rests—Is the Mathematician likely to prove a closer reasoner than other men in other subjects—why?

A. 9. The grounds on which the superiority of mathematical reasoning rests are first, the absence of any hypothesis secondly, if there be any doubt in regard to the truth of a proposition assumed, we have only to turn to the proof of it. thirdly, all the terms are clearly defined. fourthly, the reasoning is close, all the steps im-

mediately follow each other. And there are others also which give rise to the superiority. The mere mathematician is not likely to prove a good and sound reasoner on subjects that do not fall within his province; for he is not taught that caution which a metaphysician is taught and which is essentially necessary in the reasoning. The mathematician is more likely to blunder in such circumstances than the metaphysician. But it is to be observed that this remark is applicable to the mere mathematician—a character who seldom appears in modern times.

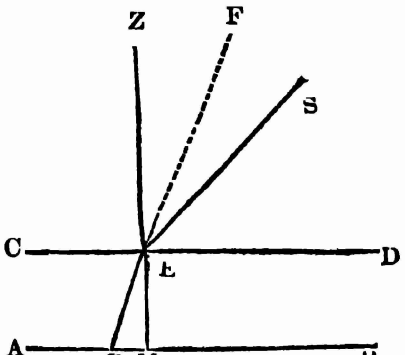
T. Teroomala Row.

Astronomy.

Q. 1. What are the principal corrections to be applied to astronomical observations? Explain the nature of each.

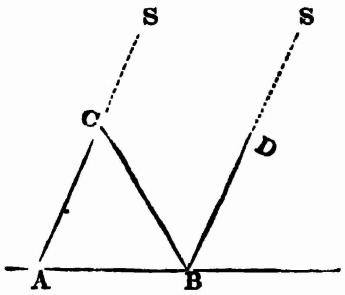
A. 1. Refraction, Aberration, Parallax, Precession, and Nutation are the principal corrections to be applied to astronomical observations.

Refraction:—Instead of supposing the atmosphere to consist of concentric layers or shells varying in density, let it be supposed to be homogeneous and consequently five miles in height.



Let A B be the surface of the ⊕, C D that of the atmosphere, and S a star. The ray S E strikes on C D at E and is refracted in the direction E G. G E M is therefore the angle of refraction. A spectator at G sees the star at F, consequently Z E F is the apparent zenith distance which when added to the error due to refraction, *i. e.* ∠ F E S, gives the true zenith distance Z E S. The effect of refraction therefore is to raise a heavenly body and the

amount of it is expressed in terms of the apparent zenith distance of the body. Hence the zenith distance is called the argument of the equation of refraction.



Aberration :—A B is the direction of the ⊕'' motion, A C is that of the telescope, S a star seen in the direction A C. While the ⊕ is moving from A to B, light coming from the body takes the same time to move from C to B. The telescope must be so inclined that the ⊕'' vely: vely. of light : : A B: C B. Hence the C B D or A C B is called the aberration, the amount of which is expressed in terms of C A B or the ⊕'' way and the effect of aberration to throw the body in the direction of the ⊕'' motion.

Parallax:—Let A L be the ⊕, C its centre, A the position of a spectator and M the moon. M is seen at A in the direction of A M and at C in the direction C M. A M C is therefore the angle of displacement or as it is called the parallax of the body. Hence parallax may be defined to be the ∠ subtended at the centre of a body by the radius of the ⊕.

Precession :—Precession is viewed as an astronomical fact by a comparison of longitudes. It is the retreat of the equinox on the ecliptic 50'' a year, the obliquity being preserved. This retreat is the same thing as the pole of the equator describing a ⊙ round the pole of the ecliptic which is stationary. This motion is followed by the conical motion of the ⊕'' axis. By means of precession, the longitudes, AR' and declinations of bodies are altered. Precession is uniform, and does not affect the latitudes of the bodies.

Nutation :—It is a small gyratory movement of the ⊕'' axis. The pole of the equator describes round its mean precessional place an elipse whose major axis is 18'' and the minor 14''. The period of nutation is 19 years. Both Nutation and Precession cause the pole of the equator to describe a waving ring.

TEROOMALA ROW.

Q. 3. Obtain formulæ for the right ascension and declination of a star in terms of its longitude and latitude and the obliquity of the ecliptic.

A. 3. Let $\curlywedge$ P = the obliquity of the earth.

P S = co-declination.

$\curlywedge$ P S = 90 + AR.

P $\curlywedge$ S = co-longitude.

$\curlywedge$ S = co-latitude.

D = Declination.

$$\text{Cos P S} = \cos \curlywedge \text{P} \cos \curlywedge \text{S} + \text{Sin} \curlywedge \text{P} \sin \curlywedge \text{S} \cos \text{S} \curlywedge \text{P}.$$

$$\text{Sin D} = \cos \text{O}. \sin \text{Lat} + \sin \text{O}. \text{Cos. Lat. sin Long}.$$

$$\text{Again } \cos \curlywedge \text{P S} = \frac{\cos \curlywedge \text{S} - \cos \curlywedge \text{P} \cos \text{P S}.}{\sin \curlywedge \text{P} \sin \text{P S}.}$$

$$\cos.(90^\circ + \text{AR}) = \frac{\sin \text{Lat} - \cos \text{O} \sin \text{D}.}{\sin \text{O} \cos. \text{D}.}$$

$$-\sin \text{AR} = \frac{\sin \text{Lat} - \cos \text{O} \sin \text{D}.}{\sin \text{O} \cos \text{D}.}$$

$$\sin \text{AR} = \frac{\cos \text{O} \sin \text{D} - \sin \text{Lat}.}{\sin \text{O} \cos \text{D}.}$$

DURMAROYEN.

Q. 4. What is the effect of aberration on a star at the pole of the ecliptic, and also on one situated in the ecliptic?

A. 4. The effect of aberration on a star at the pole of the ecliptic is to give it latitude and a varying longitude, and make it describe a $\odot^{le}$ round that pole; and its effect on a star situated in the plane of the ecliptic is to make it move in an arc, the extremities of which are each 20″ distant from the mean position of the star.

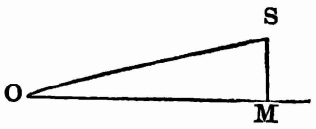
D. TEAGIAH.

Q. 5. Describe the observations taken to determine the sun's longitude, and write down the formulæ expressing the longitude in terms of the results of observation.

A. 5. Observe daily the AR of the sun by means of the transit

and a sidereal clock, and his declination by the mural circle, and apply all the necessary corrections to the AR[s] and declinations of the sun, and then by means of Spherical Trigonometry actually work out the sun's daily longitudes. By this means a table of the longitudes of the sun is formed.

The formula required for this purpose is this: OM, and SM, *i. e.* the AR and declination are known by observation, then by Napier's rules, we are to find O S, *i. e.*, the longitude of the sun.

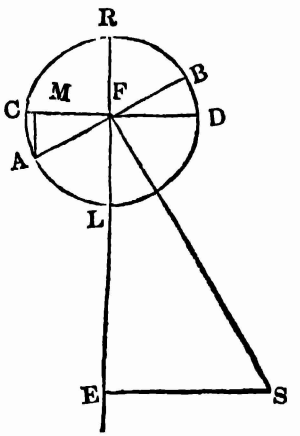


Cos L=Cos AR. Cos declination.

T. Teeroomala Row.

Q. 9. Find an expression for the phase of a planet, supposing it to move in the plane of the ecliptic.

A. 9. E is the ⊕, S the sun and C D a planet, it is required to find the phase of the planet. E sees C L D, and the sun enlightens A L B, consequently A L D is the enlightened portion of the planet turned towards the earth, and it is projected on C D into M D. Now R F D=L F D, then adding S F D we get A F D= R F S=the exterior ⌊ of elongation.



M D=vers of A F D=vers of the exterior ⌊ of elongation.

∴ the breadth of the phase = radius of the planet multiplied by the versed sine of the exterior ⌊ of elongation. The same proof will do for both superior and inferior planets and for our moon. In the case of superior planets, the phase is always gibbous, and in that of inferior and our moon, the phase varies from new to full.

T. Teeroomala Row.

Q. 10. If the maximum elongation of Venus were 30°, and her orbit and that of the earth were circles in the same plane, what would be the ratio between the radii of the two orbits?

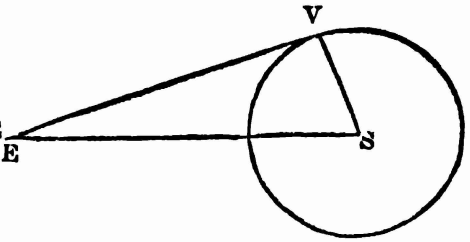
A. 10. In $\triangle$ S E V, S V E is a rt $\angle$.

$$\frac{S\ V}{S\ E} = \text{Sin } E$$

$$= \text{Sin } 30°$$

$$\therefore S\ V = \text{Sin } 30° \times S\ E$$

$$= \tfrac{1}{2}\ S\ E.$$



T. Durmaroyen.

Q. 12. Explain roughly the way in which the new planet Neptune was discovered.

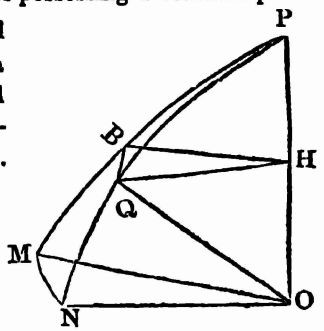
A. 12. Astronomers in observing the planet called Herschel found certain perturbations in its orbit the cause of which they were incapable of tracing. They guessed that a certain planet might lie beyond Herschel and generate these perturbations. They accordingly supposed a planet to lie at a particular distance from Herschel, and calculated its effect upon the latter. Finding that their calculations did not coincide with their observations, supposed a planet to lie nearer or further according to their results and calculated upon its effect; after several trials they were enabled to get the approximate position of the new planet; then they directed their telescopes to that part and discovered the planet and called it Neptune.

Streenevassa Row.

Spherical Trigonometry.

Q. 1. How do degrees vary on circles possessing a common pole ?

A. 1. Let P be the pole of any small $\odot^{le}$, of which B Q is a part, and of a great $\odot$, of which M N is a part, and let B Q and M N be arcs corresponding to $= {}^{1}\angle_{s}$ B H Q and M O N. Join O Q.



Then $\frac{B\,Q}{Q\,H} = \frac{M\,N}{N\,O}$

$\therefore \frac{B\,Q}{M\,N} = \frac{Q\,H}{Q\,O}$

$= \text{Sin } Q\,O\,P$

$= \text{Cos } Q\,O\,N$,

$\therefore B\,Q = M\,N \text{ Cos } Q\,O\,N$

But M N is constant

$\therefore B\,Q \propto \text{Cos } N\,O\,Q$

D. Teagiah.

Q. 2. Supposing A, B, C, to be the angles of a spherical triangle; prove that $\Pi > A + B - C$ and $< A + B + C$.

A. 2. Let A, B, C, a, b, c be the $\angle$s and sides of the primitive Δ, and A′, B′, C′, a', b', c' the $\angle$s and sides of its polar Δ.

(1) Then $a' + b' > c'$

$\overline{\Pi - A} + \overline{\Pi - B} > \overline{\Pi - C}$ ∵ the polar Δ is supplemental to the primitive.

$\therefore 2\Pi - \overline{A + B} > \Pi - C$

$\therefore 2\Pi - \Pi$ or $\Pi > A + B - C$

(2.) $2\Pi > a' + b' + c'$

$> \overline{\Pi - A} + \overline{\Pi - B} + \overline{\Pi - C}$

$> 3\Pi - \overline{A + B + C}$

$\therefore A + B + C > 3\Pi - 2\Pi$ or Π

$\therefore \Pi < A + B + C$

C. Teroovengadum.

Q. 3. Granting that cos. $a = \frac{\cos A + \cos B \cdot \cos C}{\sin B \cdot \sin C}$ prove

that cos. $A = \frac{\cos a - \cos b \cos c}{\sin b \sin c}$

and cos. a sin. b = sin a cos b. cos C + sin c. cos A.

A. 3. Since $\text{Cos } a = \frac{\text{Cos A} + \cos B \cos C}{\text{Sin B Sin C}}$ is true for any Δ

∴ it is true for its polar Δ,

$$\therefore \text{Cos } a' = \frac{\text{Cos A}' + \cos \text{B}' \cos \text{C}'}{\text{Sin. B}', \text{Sin C}'}$$

$$\therefore \text{Cos } (\Pi - \text{A}) = \frac{\text{Cos } (\Pi - a) + \cos (\Pi - b) \cos (\Pi - c)}{\text{Sin } (\Pi - b) \text{ Sin } (\Pi - c)}$$

$$\therefore -\text{Cos A} = \frac{-\text{ Cos } a - \cos b. - \cos c}{\text{Sin } b \sin c}$$

$$\therefore \text{Cos A} = \frac{\text{Cos } a - \cos b \cos c}{\text{Sin } b \sin c}$$

Again, Cos a = cos b cos c + sin b sin c cos A

and Cos c = cos a cos b + sin a sin b cos C

$\therefore$ Cos a = cos b (cos a cos b + sin a sin b cos C) + sin b sin c cos A

$\therefore$ Cos a (1 — cos^2 b) = sin a cos b sin b cos C + sin b sin c cos A

$\therefore$ Cos a sin^2 b = sin b (sin a cos b cos C + sin c cos A)

$\therefore$ Cos a sin b = sin a cos b cos C + sin c cos A

S. NADAMOONY.

Q. 4. Find sin $\frac{a}{2}$ in terms of A, B, and C.

A. 4. $2 \sin^2 \frac{1}{2} a = 1 - \cos a$

$$= 1 - \frac{\text{Cos A} + \cos \text{B} \cos \text{C}}{\text{Sin B sin C}}$$

$$= -\frac{\text{Cos B cos C} - \sin \text{B sin C} + \cos \text{A}}{\text{Sin B sin C}}$$

$$= -\frac{\text{Cos } (\text{B} + \text{C}) + \cos \text{A}}{\text{Sin B sin C}}$$

$$= -\frac{2 \text{ Cos } \frac{1}{2} \overline{\text{B} + \text{C} + \text{A}} \cos \frac{1}{2} \overline{\text{B} + \text{C} - \text{A}}}{\text{Sin B Sin C.}}$$

Let $\text{S}' = \frac{1}{2} \overline{\text{A} + \text{B} + \text{C}}$; Then $\overline{\text{S}' - \text{A}} = \frac{1}{2} \overline{\text{B} + \text{C} - \text{A}}$

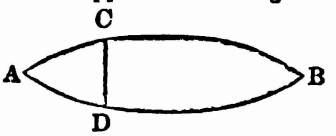
$$\therefore \text{Sin}^2 \tfrac{1}{2} a = -\frac{\text{Cos S}' \text{ Cos } \overline{\text{S}' - \text{A}}}{\text{Sin B Sin C}}$$

$$\therefore \text{Sin } \tfrac{1}{2} a = \sqrt{-\frac{\text{Cos S}' \text{ Cos S} - \text{A}}{\text{Sin B Sin C}}}$$

T. MOOTOOSAWMY.

Q. 5. When does ambiguity attend the solution of a right angled triangle?

A. 5. In the solution of a right angled triangle, the ambiguous case enters only when an angle and the side opposite to it are given.



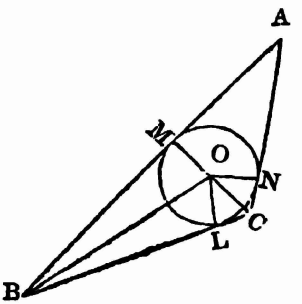
Let A D C be the triangle where C D and the ∠ A are given. Now by producing A C and A D to meet at B, we have two Δ^s A D C and B D C which have the same data for the ∠ B=∠ A and C D is common.

Therefore we have an ambiguity when an angle and the side opposite to it are given.

T. Sakaujee Row.

Q. 7. A circle is inscribed in a spherical triangle, find its radius in terms of the sides of the triangle.

A. 7. Let A B C be Δ, M N L the ⊙ inscribed in it, O M, O L, O C be the radii of ⊙. It is required to find O L in terms of the sides of Δ.



In rt. $\angle^d$ Δ B O L

Sin B L = Cot L B O tan O L.

$\therefore$ tan O L = Sin B L tan L B O.

$\therefore$ 2 B L + 2 A n + 2 n c = 2 S, S being $\frac{1}{2}(a+b+c.)$

$\therefore$ B L = S—A C

= S—b.

$\therefore$ tan O L = Sin (S— b) tan L B O.

$\therefore$ tan O L = Sin (S—b) tan $\frac{1}{2}$ B.

$$= \text{Sin (S}-b)\sqrt{\frac{\sin(S-a)\,\sin(S-c)}{\sin S\,\sin(S-b)}}$$

$$= \sqrt{\frac{\sin(S-a)\,\sin(S-b)\,\sin(S-c)}{\sin S.}}$$

T. Durmaroyen.

Q. 8. The angles of a spherical triangle are 62° 4″, 88° 6″,

and $30^{\circ}\ 2'$, what is its area in square miles, supposing the earth's radius to be 4000 miles ?

A. 8. Area of a spherical triangle $= (A + B + C - 180^{\circ}) \frac{\pi R^2}{180^{\circ}}$

In the given triangle

$$\left.\begin{aligned} A &= 62^{\circ}, 4'' \\ B &= 88^{\circ}, 6'' \\ C &= 30^{\circ}, 2'' \end{aligned}\right\}$$

$\therefore A + B + C = 180^{\circ}, 12''$

$\therefore A + B + C - 180^{\circ} = 12''$

$$= \frac{1}{300} \text{ of a degree.}$$

$$\text{Area} = \frac{1}{300} \times \frac{\frac{22}{7} \times 16000000}{180}$$

$$= \frac{1}{300} \times \frac{22 \times 16000000}{7 \times 180}$$

$$= \frac{22 \times 16000}{18 \times 3 \times 7}$$

$$= \frac{22 \times 8000}{9 \times 3 \times 7}$$

$$= \frac{176000}{189}$$

S. M.

$= 931\frac{41}{189}$

P. CHINNATHUMBE.

Russell's Modern Europe.

Q. 1. Describe the state of Scotland at the time of Mary's accession to the throne and enumerate the principal events which marked her reign.

A. 1. Scotland at the time of Mary's accession to the throne was in a miserable condition, being torn by religious dissensions and civil broils. Although on her arrival from France she was received by the people with the strongest expressions of joy and the loudest acclamations of applause, she afterwards incurred the displeasure of her subjects on account of her religion. The Reformed opinions had

already made considerable progress in the kingdom; and so strong was the hatred entertained by the Protestants towards the Popish religion that Mary with great difficulty obtained permission to perform the mass in her own chapel. Every preacher of the new doctrines declaimed vehemently against the absurdities of the Catholic Faith; and the pulpit became merely a stage for exposing the characters of individuals in authority. The austere principles of the Reformed party imposed a check upon Mary's gay and licentious manners, which she had acquired in her early days at the court of France.

The reign of Mary was distinguished by several events remarkable in history. The marriage of the queen with Darnley was celebrated, notwithstanding the many obstacles which Elizabeth threw in the way to prevent this union. The murder of Rizzio by Darnley and his partisans; the blowing up of Mary's husband, together with the rebellions which the English queen encouraged from motives of policy and interest, were the principal events that marked the reign of Mary queen of Scots.

A. NARRAIN ROW.

Q. 3. Name the leaders of the religious parties into which France was divided during the reigns of Charles IX., Henry III., and Henry IV., the battles fought in the course of the civil war, the foreign powers by which the respective parties were aided, and the extent of assistance rendered by them respectively.

A. 3. The religious parties into which France was divided, during the reigns of Charles IX., Henry III., and Henry IV., were the Huguenots and Catholics. The leaders of the former were Conde, Coligny, Andelot and the king of Navarre; and those of the latter were the two Dukes of Guise, Montmorency, Henry Duke of Anjou, and the Duke of Mayenne. The battles fought in the course of the civil war, were those of Dreux, St. Dennis, Jarnac, Moncontour, Coutras, and Ivri. The foreign powers by which the religious parties in France were assisted were Spain, England and Germany. Philip II. of Spain espoused the cause of the Catholics, supported the Catholic league and sent ample supplies of men. England and Germany aided the distressed Huguenots. The former supplied them with men and money and the latter sent them reinforcements.

C. TEROOVENGADUM.

Q. 4. Sketch the origin and progress of the republic of the United Provinces. State the date of the Union, and describe briefly the course of the contest maintained by the republic in support of its independence.

A. 4. When the Reformation made rapid advances in the Netherlands and drew several converts to the new doctrines, Philip II. of Spain to check the progress of these doctrines, established the inquisition in that country in its most diabolical extravagance ; and the Duke of Ala a fit instrument in his hands exercised the most horrible cruelties and imposed oppressive taxes on the inhabitants. The whole of Netherlands became a scene of confiscation, execution, torture and death. The provinces enraged at this merciless despotism rose up in arms against their masters and resolved to shake off the Spanish yoke. In this noble attempt they were materially aided by Elizabeth, Casimir the prince palatine and the French. They fought with the Duke of Alva and obliged him to leave the country after having been shamefully defeated at Alcmaer. On the death of Requesens, the next Governor of the Low countries; the Spanish soldiers that served under him, mutinied for pay, furiously ravaged the city of Antwerp and threatened other towns with a similar fate. This event induced all the provinces except Luxomburg to form an union styed the Pacification of Ghent, and to continue the war with vigour. Some time after, the prince of Orange, who had been suspected by the Protestants and the Catholics of his party for his moderation, took advantage of the jealousy that arose between Francis duke of Anjou and Casimir, the leaders of the revolted provinces, and formed in 1579 the famous union of the seven provinces Holland, Zealand, Utrect, Guelderland, Overyssel, Groningen and Friesland, where the Protestant interests predominated and where he laid the establishment of a small republic. The war was continued, and many bloody engagements were fought between the provinces and the Spaniards with various success. After struggling for about seventy years, with unremitted perseverance and indefatigable industry, during which, the furious battles raged in every part of the country, and the sieges of many important places undertaken with success by both parties, the provinces at last succeeded in crippling the power of Spain and getting their republic acknowledged independent and not at all subject to the jurisdiction of Spain. Although the country of the Low countries was a scence of war and desolation for so many years and was rendered a wilderness,

still her industrious inhabitants by their studious exertions increased the products and the wealth of their country and extended their commerce to all the quarters of the globe.

T. SAKAUJEE ROW.

Q. 5. Describe the character of Elizabeth, and the leading features of her foreign and domestic policy. Who were her principal ministers?

A. 5. Elizabeth was a woman of masculine understanding. During her whole administration, she was cautious but decisive. She was very jealous of her prerogatives and by her economy and vigour the two characteristics of her domestic policy never brought herself under the influence of the commons. She always united her interests with those who were struggling for their civil and religious liberties. She provided for the happiness and security of her people. The principal ministers of Elizabeth were the two Cecils.

C. TEROOVENGADUM.

Q. 7. State the circumstances which led to the commencement of the Thirty Years' war, and the causes which induced Gustavus Adolphus to engage in it.

A. 7. The Thirty Years' war is traceable to the reformation and the exorbitant power of the house of Austria. Mathias, who had been very indulgent to the protestants before his accession to the throne of Germany, refused to extend their privileges. He now openly threw off the mask and convinced them that he was their master. As his health was declining, he caused his cousin Ferdinand de Gratz, duke of Stiria to be elected King of Bohemia and acknowledged in Hungary. This family compact alarmed the protestant powers and roused them to open rebellion. The malcontents in Hungary were easily pacified; but the Bohemians whose privileges had been invaded obstinately continued in arms and elected Frederick V, elector palatine, their King. These were the circumstances which led to the commencement of the Thirty years' war.

Gustavus Adolphus was induced to engage in the war, because Ferdinand had assisted his enemy the King of Poland, had treated the Swedish Ambassador with disrespect, and formed a design of extending his dominion over the Baltic. But his chief motives were the love of glory and his zeal for the protestant religion.

C. TEROOVENGADUM.

Q. 8. What part did France take in the war? Show the inconsis-

tency in Richelieu's treatment of his Protestant fellow-subjects, as contrasted with his policy towards the Protestant states of Germany.

A. 8. France took an active part in the war. She first supplied Gustavus with an annual subsidy of a hundred thousand livres, and, after his death, levied five considerable armies for crushing the power of the house of Austria. Richelieu oppressed his protestant fellow-subjects and, after humbling them, supported the protestant states of Germany with a view of suppressing the power of the house of Austria.

C. Teroovengadum.

Q. 10. Describe the career of Wallenstein and the circumstances of his death.

A. 10, Wallenstein was the ablest imperial general that made head against the Swedes. Having been for sometime in disgrace, he was restored to the command of the army with unlimited powers, soon after the appearance of the Swedes in Germany. He reduced Prague and greater part of Bohemia which had been conquered by the Elector of Saxony. He distinguished himself in the battle of Lutzen by opposing the progress of the Swedes. His death was occasioned by the treachery of the Emperor. Finding that Wallenstein acquired unbounded power, Ferdinand ordered him to be assassinated.

C. Teroovengadum.

Q. 12. State briefly the causes which led to the Peace of Westphalia, and give a short outline of its principal provisions.

A. 12. The causes that led to the peace of Westphalia were the following:—After the victory gained at Zummerhausen, the confederates under Banier siezed old Prague; and Charles Gustavus count palatine of Deux Ponts was about to take New Prague. The emperor therefore was strongly inclined for a peace. The Swedish queen Christina, though her arms were decidedly victorious, desired to put an end to the hostilities that she might better cultivate learning and arts. The German confederates were exhausted by such long wars, that they were willing for a peace. This treaty provided that France should possess Brisac, and its dependencies; the archbishoprics of Toul, Verden, and Metz; the palatinates of Upper Alsace, and Lower Alsace. That Sweden should have Upper Pomerania, and other possessions. All the powers were satisfed by

a just partition of conquests. This treaty confirms the peace of Passaw in its fullest extent; and provides that Lutherans, and Calvinists should be put on the same footing, that the Emperor should take 6 Protestants into the Aulic council.

A. Narrain Row.

Q. 14. In what way did the Reformation tend to the cultivation of Literature and Science?

A. 14. The Reformation greatly contributed to the cultivation of Literature and science. The Reformers directed their attacks against the abuses of the Catholic religion; and held up the bible as the storehouse of all morals, and as the standard of references. In order to oppose the Catholics more vigorously, the followers of the new doctrines studied the old languages Latin and Greek, and extended the sphere of their knowledge. The Catholics in order to defend themselves against the erudite attacks of the Reformers, applied themselves to study, and acquired distinction for their knowledge. Thus a universal desire of study and application diffused itself through all classes of men, and the Reformation giving a safe freedom to the opinions of man, works were written, nature examined, and new theories propounded.

A. Narrain Row.

Political Economy.

Q. 1. Define Wealth, and show that the institution of property in land is essential to the production of wealth.

A. 1. Wealth consists in those commodities which have an exchangeable value, or which can become articles of commerce. An article however useful or even necessary it may be to our existence, cannot be ranked as wealth if it has no exchangeable value. The air we breathe and without which there could be no existence is not considered as constituting wealth, while the diamond and the rubee which are of no use pass for wealth, because they can be exchanged for other commodities. The term wealth was for a long time misunderstood; and by it was meant only gold and silver.

The institution of property in land is essentially necessary to the production of wealth, and therefore to the prosperity of the country. If land did not become private property, and every one had equal

claim to it, none would take care of the land so much as if it were his own. If an industrious man were to cultivate lands, and raise crops on them, the idle and the strong would immediately pounce upon the produce and carry it away. But on the contrary if land as it is now, be shared among individuals by the government, every man will cultivate his field, with the greatest labor, and raise good crops. Those that remain idle suffer for their negligence and become poor; and they would therefore be tempted to attend to their fields, and make them productive. Thus we see that the institution of property in land is a great stimulus to industry, and contributes to increase the wealth of a country.

A. NARRAIN ROW.

Q. 2. Show by reference to history that the insecurity of property tends to make a people poor, and to degrade it in the scale of civilization.

A. 2. History affords us innumerable examples illustrative of the miserable effects of the insecurity of property. Syria and Asia Minor two of the wealthiest and richest countries in ancient times, are now in the most wretched condition merely because the right of property was not protected. The people of the countries of Persia and India degenerated, since their conquest by the Mohamedans and occupy no longer that elevated position which they formerly did. The silk manufacture of Tripoli greatly declined in consequence of the avarice and despotism of the Pacha.

C. TEROOVENGADUM.

Q. 3. Explain the causes which render Barter necessary to civilization, and its tendency to produce a division of labour.

A. 3. In order to show that barter is necessary to civilization let us first see what evils would be experienced without it. Then every man, having no communication with his neighbours, would live, for himself, the mutual assistance which now prevails between man and man would not be found and the free intercourse that has now spread itself among the different nations and has so happily contributed to the progress of nations in the career of civilization would never have come into existence. On the other hand it promotes a free intercourse not only among the different people of the same country but also among the different tribes on the globe and introduces the arts and civilization of one country into another. It also teaches us to apply ourselves to a single branch of art and produce more than

we can possibly consume and enables us to exchange the surplus thus produced for commodities which we ourselves have not produced to supply our other wants: thus barter gradually and insensibly brings in the institution of the division of labour.

P. SAKAUJEE ROW.

Q. 4. Give a definition of Capital generally. Distinguish between fixed and circulating Capital. Give instances to illustrate and explain the operation of it in the production of wealth.

A. 4. Capital is that sum of money, or that quantity of commodities, which is employed in any undertaking; in buying materials, and paying wages to laborers. No work can be undertaken without capital; it is necessary to the cultivation of land, and to the erection of buildings. There are two sorts of capitals, the one called fixed capital, and the other known as circulating capital. The former comprehends lands, houses, barns, implements of husbandry, and animals employed in cultivation. Under the latter, come the wages of the laborer, and the profits of capital. Oxen are esteemed as fixed capital when they are employed in the fields, and circulating capital when they are brought to the market. Sheep in Tibert form the fixed capital, but in India circulating capital.

Capital may be employed in different ways, either in agriculture, in manufactures, in mining and fisheries, or it may be lent. In all these pursuits, it generally brings profits to the employer. When capital is employed in agriculture, the laborers are paid, and crops are raised which are sold to the people; and the capitalist derives good profits. Thus he has contributed to supply the necessaries of all in general. In all other employments of capital, the people likewise share the produce; laborers receive wages and reproduce what they have consumed with an increase. Thus we see that the employment of capital is productive of wealth to a country.

A. NARRAIN ROW.

Q. 5. Explain what is meant by Immaterial Capital, and the manner in which it conduces to the production of wealth.

A. 5. By immaterial capital is meant that amount of knowledge which a man possesses. We talk frequently of the immaterial capital of a nation, for a nation is nothing more than an aggregate of individuals. This capital is considered as fixed capital, because it is

as it were in some manner fixed in the mind. To a country, immaterial capital is of a great consequence, because on it depends its amount of prosperity. Immaterial capital regulates the course in which the material capital of a nation is to be employed. Capital is productive of wealth to a country only when it is properly employed. Mr. Senior speaking of the Irish, states as a reason for their indigent and miserable state, the want of immaterial capital among them. The wealth of a nation consists in those commodities that can become articles of commerce, and therefore the immaterial capital which directs the material capital in a proper and most convenient channel, and thus increases the quantity of commodities, is productive of wealth to a country.

A. Narrain Row.

Q. 8. Explain value. In what sense or to what extent can there be a standard or a measure of value ?

A. 8. The value of a commodity is estimated by the quantity of other things for which that commodity will exchange. It is a more comprehensive term than price. The price of a commodity is estimated in money. The standard of value of a commodity is its natural value which consists of rent, profit, and wages.

A. Dique.

Q. 9. By what is the Market Price of a commodity regulated ? Show that the standard of value, adverted to in the preceding question, can only be temporarily affected by the adventitious circumstances which regulate the Market Price of a commodity.

A. 9. The proportion that the supply bears to the demand regulates the market price of a commodity. When there is a glut of any commodity in the market, it is sold for much below its natural value. This will only be temporary for the commodity will hereafter be witheld from the market.

A. Dique.

Q. 10. Explain the origin of the Rent of Land.

A. 10. When population presses upon the means of subsistence, commodities rise in price and occasion new lands to be taken into cultivation ; and if these new lands be not of the best sort or be very incommodiously situated, the produce of these new lands will be brought to market at a very high price in order to repay the capi-

talist for his increased cost of production; besides, the cultivator of these lands has to overcome the most disagreeable and difficult tasks in cultivation. Now cultivating these lands under such difficulties and at a greater cost of production is the same as cultivating with ease the superior soils already in cultivation at a less cost of production and paying a rent to the owner. Under such circumstances the cultivators of the new lands find it convenient to cultivate the superior soils and pay their owners for occupying the lands a rent which is the surplus of the high price at which corn is now sold over the small cost of production of the commodity on this superior soil. Thus rent arises from the high price of agricultural produce.

T. SAKAUJEE ROW.

Q. 11. What classes of persons are included under the denomination of *Unproductive Labourers*? Show that many of these so called *Unproductive Labourers* are indirectly necessary to the production of wealth.

A. 11. Under the term unproductive labourers, come all those that do not labour either in the fields or in manufactures. The ministers of state, magistrates, lawyers, physicians, the army, all these are comprehended under the class of unproductive labourers. These are essential to the production of wealth. The police secures to the productive labourers the free enjoyment of what they produce; the lawyers, plead their cause whenever injury done them; physicians secure their health; thus the unproductive labourers provide for the free execise of the industry of people, which alone can promote the wealth of a nation.

A. NARRAIN ROW.

Q. 12. Explain the origin and use of money.

A. 12. In every rude state of society, exchange is made by bartering one article or commodity for another. But when the division of labour begins to take place, considerable inconvenience is experienced. A baker, for instance, might want meat at a time when the butcher did not want bread. Therefore, it became obvious that every one should possess himself with something which would be willingly taken at all times by another. Several commodities were used as media of exchange,—wedges of rock-salt, shells, tobacco, &c. But none of them have been found to answer this end so well as metals.

They are most durable, densest and consequently least bulky, and are susceptible, by the process of fusion, of being divided into a convenient number of parts. They were first used in bars, and this was attended with two inconveniences. The processes of weighing and assaying metals consumed a great deal of time before any commodity was given in exchange for them. Consequently, it became necessary to find out a better mode of using them. This was the invention of coining ; for, coining a piece of metal is fixing on it a particular stamp or impression which declares it to be of a certain value. This is the origin of money.

Money is principally useful as a measure of value ; but it is by no means an accurate criterion of value, for its exchangeable value fluctuates according as there is an abundance or scarcity of it in the market.

C. Teroovengadum.

Chemistry.

Q. 1. Can you give any definition of the term Chemistry ? in other words, state what you understand by it.

A. 1. Chemistry is the science which treats of the intimate nature of bodies, and investigates their chemical properties, in connection with the proportions in which they combine, and the changes they undergo in combination or decomposition.

A. Narrain Row.

Q. 2. Does Chemical action take place at appreciable distances ?

A. 2. Chemical actions take place only between bodies of inappreciable magnitudes, and at inappreciable distances. This constitutes the main distinction between chemistry and Natural philosophy, where the attraction exists between great masses and at considerable distances.

A. Narrain Row.

Q. 3. Of the three forms of aggregation in which matter is found, state which is the most favourable to Chemical action.

A. 3. Of the three forms of aggregation, namely, solid, liquid and gaseous, the liquid state is the most favourable to chemical action.

T. Sakaujee Row.

Q. 4. State why forms of aggregation are not favourable to Chemical action.

A. 4. The solid and gaseous forms of bodies are not favourable to chemical actions ; for the attraction of aggregation which is an antagonist to chemical action is very great in solid bodies, and in gaseous bodies, there being scarcely any cohesive force, the particles are so far from each other as not to lie within the sphere of chemical action.

T. SAKAUJEE ROW.

Q. 5. What are the Agencies, independent of the form of aggregation, which chiefly influence and determine Chemical action?

A. 5. The agencies, independent of the form of aggregation, which chiefly influence and determine chemical action are heat, light, and electricity.

T. SAKAUJEE ROW.

Q. 6. Have these Agencies any material form or density appreciable by any means at our disposal?

A. 6. These agencies have no material form or density appreciable by any means at our disposal ; and in consequence of this they are called imponderable agents.

T. SAKAUJEE ROW.

Q. 7. Look around and state whether the substances you see are simple or compound.

A. 7. When we look round and examine the bodies about us, we see that all of them are in a compound state. The atmosphere, the ocean, the vegetable and the animal kingdoms, and the earths are all composed of compound bodies.

T. SAKAUJEE ROW.

Q. 8. State precisely the meaning you attach to these terms.

A. 8. By the term simple, Chemists do not mean that bodies to which it is applied are absolutely simple or consist of a single substance but only consider them simple merely because these bodies eluded all attempts to decompose them. By the term Compound, Chemists understand those bodies which are composed of two or more substances which are supposed to be simple.

C. TEROOVENGADUM.

Q. 10. Are the Elements of the Ancients such as are now termed Elements?

Q. 11. How do you know that the terms given by the ancients to Air, Water, &c., are incorrect?

As. 10 and 11. The bodies which the ancients considered as the elements are not such according to our present notions derived from experiments. Their elements were "the fire, the water, the air, and the earth." But our modern philosophy has proved upon sound principles; (1st) that water is a compound produced by the combination of Oxygen and hydrogen; this fact has been established both analytically, and synthetically, (2nd) that the earths are metallic oxides; 3rdly that the air by which we are surrounded is a mechanical union of Oxygen, and nitrogen, in due proportions, together with a variety of exhalations from the earth, (4) that the idea of "fire" is vague, and that it does not signify any particular object. Thus we discover a fallacy in the chemistry of the Ancients.

A. Narrain Row.

Q. 20. Can you give me an account of the properties of Oxygen? name the sources from which it is procured, and the methods of proceeding in order to procure it.

A. 20. Oxygen is a colorless, inodorous and elastic gas. It is a supporter of combustion; and is essentially necessary for the respiration of animals. It is procured from substances which are already combined with oxygen by decomposition, for instance from chlorate of potassa, red precipitate of mercury, and peroxide of manganese. The following equation shows the method of procuring oxygen from peroxide of manganese.

$$Mn\,O_2 + S\,O_3 = (Mn\,O + S\,O_3) + O.$$

A. Dique.

Q. 21. State what you know concerning Hydrogen, mention the source from which it is obtained, and the method of proceeding.

A. 21. Hydrogen is a colourless transparent gas 16 times lighter than oxygen. It is made the standard to which the equivalent numbers of other bodies are compared. The great levity of this gas is taken advantage of in the construction of balloons. This gas is eminently inflammable and detonates with a loud report when burnt in

connection with oxygen. It combines with sulphur, phosphorus, and carbon and renders them highly combustible. Its chief source is water. Sulphuric acid, iron filings and some water are put in a retort, the acid disposes the metal to decompose the water and combine with its oxygen. This oxide combines with the acid and forms $\overbrace{S\ O_3 + Fe\ O}$; while the hydrogen of the water passes through the tube and goes into the receiver.

T. Sakaujee Row.

Q. 26. To what is the dew found on leaves and other surfaces attributable?

A. 26. The dew found on leaves and other surfaces is attributable to the cold occasioned by the radiation of the earth. When the direct influence of the sun is withdrawn, the earth throws out heat which passes off into distant regions of space. The air in immediate contact with the earth becomes cold, the watery vapour which it contains is condensed and is deposited on the leaves in the form of dew.

C. Teroovengadum.

Q. 27. What do you know of Nitrogen, has it powerful affinities such as those displayed by Oxygen and Hydrogen?

A. 27. Nitrogen in its elementary state is a gas. It is inodorous, transparent, and colourless. It is extremely an inert element. It is principally characterised by its negative qualities. It does not support combustion; for a lighted candle is instantaneously extinguished when plunged into a jar of this gas. It does not support the process of respiration, for, an animal soon dies in it. On this account, it is called azote or life-depriver. Its principal use in the atmosphere seems to be that of a dilutent: for, it subdues the activity of oxygen and prevents combustion from being too rapid and respiration too stimulating. It is lighter than oxygen gas; its equivalent number is 14; and its symbol is N. Although, in general, it possesses no affinities such as those displayed by oxygen and hydrogen, yet it forms energetic compounds in combination with some substances. Nitric acid, aqua regia, and ammonia are powerful compounds in which nitrogen enters as an ingredient.

C. Teroovengadum.

Q. 28. How do you obtain it and from what sources?

A. 28. We obtain nitrogen by the following method. We burn a candle over water and invert over it a glass-bell. The flame of the candle gradually becomes feeble and is at last totally extinguished. The carbonic acid which is produced by the combustion of the candle is absorbed by water which continues to rise in the receiver in proportion as oxygen is consumed, and what remains in the receiver is principally nitrogen. We may obtain this gas by washing the air that is expired during the respiration of animals with lime-water. The carbonic acid contained in the exhaled air, combines with lime and forms carbonate of lime; and the residum is nitrogen.

We obtain nitrogen principally from the atmosphere.

C. TEROOVENGADUM.

Q. 30. What is the character of most of its oxygen compounds?

A. 30. The three of the oxygen compounds of nitrogen are possessed of the properties of acids and the remaining two are mere oxides. Nitric acid is most corrosive and acts powerfully on metals, particularly copper. On account of the facility with which it yields its oxygen to substances, it is employed by the chemist as an oxidizing agent. Nitric oxide has a suffocating odour and the property of taking two doses of oxygen from the atmosphere and of becoming nitrous acid. It is recognized by its orange fumes. Nitrous oxide possesses the singular property of occasioning intoxication when inhaled into the lungs.

C. TEROOVENGADUM.

Q. 42. What proofs can you adduce in support of the statements you have made?

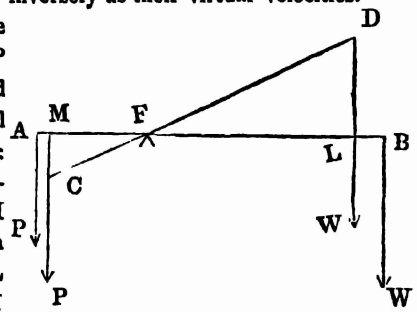
A. 42. To prove that we exhale carbonic acid, we need only breathe for a time on lime which combining with the acid forms chalk or carbonate of lime. And in order to show that we inhale oxygen we need only breathe for a time in a close vessel; after a time the whole of the oxygen in the vessel will be consumed and the remaining air in it will be irrespirable; and when a lighted taper is introduced under this vessel, it will soon be extinguished. This shows that the oxygen contained in the atmosphere in the receiver has been inhaled in respiration.

T. SAKAUJEE ROW.

Mechanics.

Q. 2. Explain the meaning of virtual velocity; and show that, when a straight lever is kept in equilibrium, the power and weight are inversely as their virtual velocities.

A. 2. Let A B be a lever, F the fulcrum, P and W two forces acting vertically at A and B and tending to produce equilibrium: then P and W are to each other inversely as their virtual velocities.



Let A B move into the position C D, produce P C to meet A B in M; and from D, draw the vertical D L meeting A B in L: therefore, the virtual velocities of P and W are C M and D L. Then because in the triangles M F C and L F D the vertical angles M F C and L F D are equal and the rt. $\angle$ C M F is equal to the rt. $\angle$ D L F; therefore the remaining $\angle$s are equal; therefore the triangles are equiangular and consequently they are similar.

Now because the triangles are similar

C M : C F :: D L : D F

alternando C M : D L :: C F : D F

But by the fundamental propn. of the lever

P : W :: F B : F A

:: F D : F C

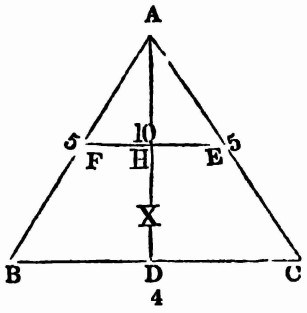
$\therefore$ P : W :: D L : C M :: W's velocity : P's. velocity.

Virtual velocity is the space which a body would describe if it were left free to move in its own direction.

C. Terroovengadum.

Q. 3. A triangle is formed of three rods whose lengths are 5 feet, 5 feet and 4 feet; supposing the rods to be homogeneous and of uniform thickness, find their centre of gravity.

A. 3. Let A B, B C, C A be the three given rods. Since the rods are homogenious and of uniform thickness, their weights are as their lengths; If, therefore, we suppose the weight of B C to be (4) Then the weights of A C and A B are 5 and 6, since the centres of gravity of the rods are their points of bisection ∴. Bisect A C, B C, and A B in E, D and F. Now join E F and A D Since A B and A C are bisected in F and E



A F : F B :: A E : E C

∴. E F ll B C

∵. A B = A C; B D = D C and A D is common

∴. ∟ F A H = H A E:

∟ A D B = A D C; ∴. Each of them = 90°

$\therefore$ A D = $\sqrt{\text{A B}^2 - \text{B D}^2} = \sqrt{25 - 4} = \sqrt{21}$

∵. F H ll B D and A B is bisected in F

∴. A D is bisected in H

$\therefore$ H D = $\frac{1}{2}$ A D = $\frac{1}{2}\sqrt{21} = \sqrt{\frac{21}{4}} = \sqrt{5{\cdot}25}$ = 2·28 nearly

∵. A B = A C and they are bisected in E and F

∴. A F = A E

∵. A F = A E; A H is common to A F H and A H E.

∟ F A H = H A E.

∴. F H = H E; ∴. F E is bisected in H.

since E, D, and F are the centres of gravity of the rods their weights may be supposed to be collected at those points

∴. the weights at E, and F are 5 and 5.

∴. the centre of gravity of these two weights is the middle point of F E I *e* H.

∴. The pressure at H = 5 + 5 = 10.

Now the weight at D = 4.

We may suppose H D to be a lever kept in equilibrium by 10

and 4 at H D. Let x be the centre of gravity of the two weights Then

$$x\,H : x\,D :: 4 : 10$$

By Componendo

$$x\,H + x\,D : x\,D :: 14 : 10$$

But H D or $x\,H$ + H D = 2·28 nearly

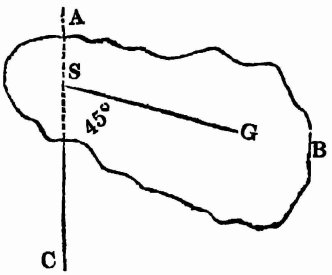
$$\therefore\ 2{\cdot}28 : x\,D :: 14 : 10$$

$$\therefore\ x\,D = \frac{2{\cdot}28 \times 10}{14} = \frac{22{\cdot}8}{14} = 1{\cdot}6\dot{3} \text{ feet nearly.}$$

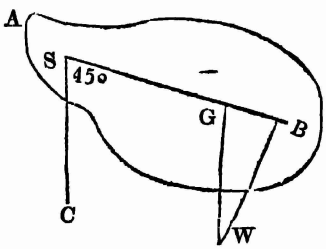
∴ The centre of gravity of the three rods is at the distance of 1·63 feet from D

T. Mootoosawmy.

Q. 4. A B is a heavy body revolving about an axis passing through S and perpendicular to the plane of the paper, G is the centre of gravity lying in the plane of the paper, and A S C a vertical through S in the same plane; supposing the weight of the body to be 10 lbs., the distance S G to be 2 feet, and the ∠ G S C to be 45°, find the moment tending to produce rotation and the force which acts as a strain on S.



A. 4. Let A B be a heavy body S the pt. of suspension, G the centre of gravity S C a vertical through S let S G = 2 feet, the ∠ G S C = 45. Since the body produces the same effect as if it were collected at its centre of gravity draw G W vertical to represent the weight of the body which is equal to 10 lbs., from W draw W B ⊥ to S G produced, now the force that tends to produce motion is equal to G W sin B G W =



$10 \times \sin 45°$ since G W is 11 to A C $= \frac{10}{\sqrt{2}}$ $\therefore$ the moment of that force $= 2 \times \frac{10}{\sqrt{2}} = \frac{\sqrt{2}\sqrt{2}}{\sqrt{2}} \times 10 = 10\sqrt{2}$ and the force which acts as a strain on S = G W. Cos B G W $= 10 \times \text{Cos } 45° = \frac{10}{\sqrt{2}}$.

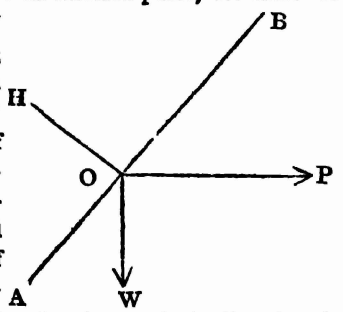
Q. 6. Describe clearly the nature of the improved wheel and axle.

A. 6. In the wheel and axle since P : W : : radius of the axle : radius of the wheel, the advantage gained is increased either by diminishing the radius of the axle or increasing the radius of the wheel or effecting both changes. But the weakness of the axle consequent on diminishing its radius and the difficulty of managing a large wheel both set limits to the advantage gained. By the following contrivance both these difficulties are evaded. The axle instead of being one contiguous cylinder is made up of two whose radii differ but a little. One end of a string is fastened to a pt. in ⊙ of the larger cylinder and the other to a pt. of the smaller cylinder and the wt. hangs in a sort of loop. By giving a revolving motion to the wheel, the string is wound round the larger cylinder while it is unwound from the smaller the direction in which it is coiled round one being contrary to that in which it is coiled round the other. In this case without encountering either of the difficulties mentioned above we can increase the advantage gained by diminishing the differce of the radii of two cylinders.

P. Vurda Charry.

Q. 8. Find the ratio between P and W for the screw.

A. 8. The screw is reduciable to an inclined plane, let therefore A B be an inclined plane, and let W the whole wt. be supported at O; draw the vertical O W to represent the weight; and let the power P act horizontally at the extremity of the handle; let r and R be the radii of the cylinder and circle described by the handle respectively: and let OH represent the reaction of the plane—and let i be the inclination of the plane. The reaction in the vertical direction is



equal the reaction x (suppose). cos i and W in the vertical direction is W; $\therefore x.\cos i = W \therefore x = \frac{W}{\text{Cos } i}$. Again P in the horizontal direction is P and W in the same direction is O, and x in that direction $= x.\sin i$; therefore the moment of x *i. e.* $x.\sin i.\ r =$ the moment of P, *i. e.* P. R. But $x = \frac{W}{\text{Cos } i}$; $\therefore \frac{W}{\text{Cos } i}.\sin i.\ r =$ P. R; $\therefore \frac{P}{W} = \frac{\tan i.\ r}{R} = \frac{\frac{d}{2\prod r}.r}{R} = \frac{d}{2\prod R}$.

C. Terroovengadum.

Q. 10. What is the use of the long pole which a tight rope-dancer carries in his hands?

A. 10. A rope-dancer in his dancing has to preserve his centre of gravity that is the vertical drawn from the centre of gravity of his body should fall exactly upon the rope. But as this is a matter of difficulty since the least deviation of the vertical from the rope will make him tumble, he takes a long pole with him. This enables him to escape the danger, for when the vertical from the centre of gravity happens to fall on either side of the rope, he immediately holds the pole in such a way that the arm of the pole on the side of the vertical shall be smaller than the other. Then the difference in the lengths of the arms makes the centre of gravity of the man and the pole fall exactly on the rope.

T. Sakaujee Row.

Russell's Modern History.

Q. 1. What sort of Government prevailed among the barbarous nations that overthrew the Roman empire?

A. 1. The government, which prevailed among the barbarous nations, that overturned the Roman empire, was a kind of military democracy in which the protection of the state was the voluntary care of its members. Matters of no great importance were transacted by principal men in the state, but the whole community assembled to deliberate upon national objects. The authority of their king or chieftain, who owed his dignity solely to his military talents, was extremely limited, and consisted rather in the privilege of advising than

in the power of commanding. Every man was at liberty to choose whether he would engage in any warlike enterprize and the conquered lands were considered as a common property, in which all had a right to share, as all had contributed to procure them. No obligation whatever was entailed on the possessors of such lands.

T. MOOTOOSAWMY.

Q. 2. Mention what you know of the conquest of Spain by the Saracens.

A. 2. Count Julian, whose daughter had been dishonored by Roderic, the last of the Visigothic kings, requested the Saracens to avenge his cause and invited them to the conquest of Spain. They who were already masters of Mauritania and inflamed with a desire of propagating their religion, readily complied with his request. They, accordingly landed in Spain and overthrew the visigothic empire in the decisive battle of Xeres fought in 714. Mousa, viceroy of Africa, to kalif Walid soon went over to finish the conquest of Spain. He permitted the inhabitants to retain their religion and laws. on condition they paid to him the same subsidy which they had paid to their former sovereigns. Those that embraced his religion were admitted to all the rights of the conquerors. Most cities submitted without opposition and those that made any resistance were easily reduced to subjection. By this mixture of rigour and lenity he soon made himself master of almost all Spain. The Spanish nation were at first very miserable under the government of the Saracens. As their rulers were not permitted, by the viceroy of Africa, to remain long in their governments, they loaded their subjects with heavy taxes and studied rather their own ease than the welfare of the community. Such was the origin, the progress, and the effect of the conquest of Spain by the Saracens.

T. MOOTOOSAWMY.

Q. 4. How did the Normans come to possess a portion of France?

A. 4. Charles the simple, who filled the French throne, was an imbecile prince and his kingdom was, therefore, a scene of anarchy and disorder. The Normans, who were already plundering the coasts, availed themselves of this opportunity to invade France. They, accordingly, sailed up the Seine, took Rouen, fortified it, and made it their head quarters. Now assured of a safe retreat, they set no bounds to their inhuman ravages and threw all France into

confusion and distress. Charles the simple, unable to cope with so powerful an enemy, endeavoured to put a stop to their depredations by concluding a treaty with them and offering his daughter in marriage to Rollo, their general or chieftain, together with a large portion of the Neustrian realm as her dowry. Francon, archibishop of Rouen who was charged with the negociation, prevailed upon Rollo, by his zeal and eloquence, to consent to the treaty, to embrace Christianity, and to do homage to Charles as the paramount lord. Accordingly Rollo was converted to Christianity and did homage to Charles less as a vassal then a sovereign in 714. All the Normans, following the example of their leader, became Christians and settled themselves in France. Such were the means by which the Normans acquired a portion of France.

T. MOOTOOSAWMY.

Plane Trigonometry.

Q. 2. Cos A = 2, find cos. 4 A.

A. 2. From $\cos n\,A + \cos (n-2)\,A = 2 \cos (n-1)\,A.\cos A$ we get $\cos 4\,A + \cos 2\,A = 2 \cos 3\,A.\cos A$ by substituting 4 for n.

$$\therefore \cos 4\,A = 2 \cos 3\,A \cos A - \cos 2\,A.$$
$$= 2\,(4\cos^3 A - 3\cos A).\cos A - (2\cos^2 A - 1).$$
$$= 8\cos^4 A - 6\cos^2 A - 2\cos^2 A + 1.$$
$$= 8\cos^4 A - 8\cos^2 A + 1.$$

Since cos A = ·2.

$$\therefore \text{Cos } 4\,A = 8\,(\cdot 2)^4 - 8\,(\cdot 2)^2 + 1.$$
$$= 8 \times \cdot 0016 - 8 \times \cdot 04 + 1.$$
$$= 1 + \cdot 0128 - \cdot 32.$$
$$= \cdot 6928.$$

P. CHINNATHUMBY.

Q. 3. Prove that $\tan B = \frac{b.\ \sin\ C}{a - b\ \cos C}$

A. 3. Since the sides of a triangle vary as the sines of the angles opposite to them.

$$\therefore \frac{a}{b} = \frac{\sin A}{\sin B} = \frac{\sin 180 - (B+C)}{\sin B} = \frac{\sin (B+C)}{\sin B.}$$

$\therefore a \sin B = b \sin (B+C)$.

$= b \sin B \cos C + b \cos B \sin C$.

$a \sin B - b \sin B \cos C = b \cos B \sin C$.

$\therefore \sin B (a - b \cos C) = b \cos B \sin C$.

$\therefore \sin B = \dfrac{b \cos B \sin C}{a - b \cos C}$.

$\therefore$ Tan B or $\dfrac{\sin B}{\cos B} = \dfrac{b \sin C}{a - b \cos C}$

P. CHINNATHUMBY.

Q. 6. Find the square root of cos. 4 A + $\sqrt{-1}$ sin 4 A.

A. 6. Since cos 2 A = cos^2 A—sin^2 A ;

And sin 2 A = 2 sin A cos A.

$\therefore$ Cos 4 A = cos^2 2 A—sin^2 2 A.

$\sqrt{-1}$ sin 4 A = $\sqrt{-1}$. 2 sin 2 A. cos 2 A,

$\therefore$ Cos 4 A + $\sqrt{-1}$. sin 4 A = cos^2 2 A + $\sqrt{-1}$. 2 sin 2 A. cos 2 A—sin^2 2 A.

= Cos^2 2 A + $\sqrt{-1}$. 2 sin 2 A. cos 2 A + ($\sqrt{-1}$. sin A)^2

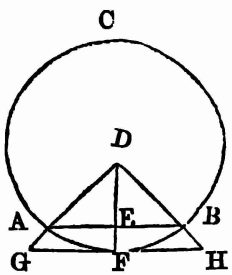
= (cos 2 A + $\sqrt{-1}$. sin 2 A)^2

$\therefore \sqrt{\text{Cos 4 A} + \sqrt{-1}. \sin 4 A} = \cos 2 A + \sqrt{-1}. \sin 2 A.$

T. MOOTOOSAWMY.

Q. 8. Compare the areas of regular dodecagons described in and about a circle.

A. 8.



Take $\odot$ A B C and D its centre.

Let A B be a side of the inscribed regular dodecagon.

From D Drop D E $\perp$ A B

Produce D E to F

Throw F draw F G $\perp$ D F.

Now G H is a side of the described dodecagon.

IV. Book Euclid.

Join D A and D B

And produce them to G and H

From Euclid we know that the inscribed dodecagon $= 12 \times \Delta$ D A B

Similarly the described dodecagon $= 12 \times \Delta$ D G H.

$$\frac{\text{Inscribed dodecagon}}{\text{Described dodecagon}} = \frac{12 \times \Delta \text{ D A B.}}{12 \times \Delta \text{ D G H.}}$$

$$= \frac{\text{A D B}}{\text{D G H.}}$$

Now D E bisects A B and is perpendicular to it

$\therefore \angle$ A D E $=$ E D B

$\because \angle$ D F G $= \angle$ D F H.

and $\angle$ F D G $= \angle$ F D H.

and D F is common to Δ^s D F G and D F H.

$\therefore$ G F $=$ F H.

$\because$ The sum of the angles at D $= 12 \times$ G D H.

$= 24 \times$ G D F.

$$\therefore \angle \text{ G D F} = \frac{\text{The sum of the angles at D}}{24.}$$

$$= \frac{360^\circ}{24}$$

$$= 15.^\circ$$

$$\frac{\Delta \text{ A D B}}{\Delta \text{ G D H}} = \frac{\text{A D E}}{\text{D G F}} = \frac{\text{A D}^2}{\text{D G}^2} = \frac{\text{D F}^2}{\text{A G}^2}$$

$$= \text{Cos}^2 \text{ G D F}$$

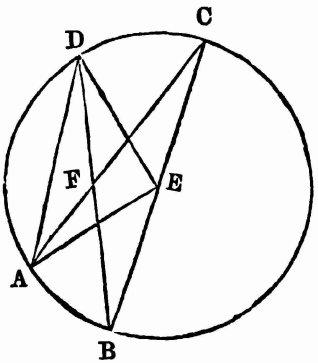
$$= \text{Cos}^2 15^\circ$$

$$= \left(\frac{\sqrt{3}+1}{2\sqrt{2}}\right)^2 = \frac{10+2\sqrt{3}}{8}$$

T. Mootoosawmy.

Q. 9. Show that opposite readings of a graduated circle eliminate the error of centering.

A. 9. Let A B C be a circle, E the centre, and F the axis of the telescope



By reading A B we read the angle A E B instead of A F B which is greater than A E B.

Therefore if we read D C then we will be reading an angle which is greater than the true angle.

We shall now show that these two errors counteract each other.

$\angle A F B = \frac{1}{2} (\angle D E C + A E B)$

Join D A;

Now $\angle A F B = \frac{1}{2} \overline{\angle A F B + \angle D F C}$

But $A F B = A D F + D A F$;

and $D F C = A D F + D A F$

$\therefore \angle A F B = \frac{1}{2} (2 F D A + 2 F A D)$

But $2 F D A = A E B$;

$2 F A D = D E C$

$\therefore \angle A F B = \frac{1}{2} (\angle A E B + \angle D E C)$.

T. Mootoosawmy.

English Poetry.

Q. 1. Paraphrase the following:

Clime of the unforgotten brave!
Whose land from plain to mountain-cave
Was freedom's home or glory's grave!
Shrine of the mighty, can it be
That this is all remains of thee?
Approach thou craven crouching slave:

Say, is not this Thermopylæ ?
These waters blue that round you lave
O servile offspring of the free !
Pronounce what sea, what shore is this ?
The gulf, the rock of Salamis !

A. 1. Land of heroes who live in the memory of all ! Every portion of thy land from plain to mountain fostered freedom or formed the grave of some illustrious hero ! Oh ! sacred abode of those that performed mighty exploits, is it possible for thee to present such a wretched appearence ? Advance thou Oh slave ! who bendest meanly before thy present masters, and say, "is not this Thermopylæ ?" *i. e.* the place where thy ancestors bravely withstood the tyrant in defence of their Country ? Oh ! abject descendant of those whose bosoms glowed with freedom, approach the sea that washes the shores of thy country and pronounce what gulf and what rock is this ? Is it not Salamis where one of the great battles of freedom was fought ?

C. TEROOVENGADUM.

Q. 4. Paraphrase—

Or let my lamp, at midnight hour,
Be seen in some high lonely tower,
Where I may oft outwatch the Bear,
With thrice great Hermes, or unsphere
The spirit of Plato, to unfold
What worlds, or what vast regions hold
The immortal mind, that hath forsook
Her mansion in this fleshy nook ;
And of those demons that are found
In fire, air, flood or under ground,
Whose power hath a true consent
With planet or with element.
Sometimes let gorgeous Tragedy
In sceptered pall come sweeping by,
Presenting Thebes' or Pelops' line,
Or the tale of Troy divine ;
Or what (though rare) of later age
Ennobled hath the buskined stage.
But O ! sad virgin ! that thy power
Might raise Musæus from his bower,
Or bid the soul of Orpheus sing
Such notes as, warbled to the string,
Drew iron tears down Pluto's cheek,
And made hell grant what love did seek.

A. 4. Or let me, before a lamp in the dead of night, in some solitary high place, peruse the works of Great Hermes, or learn the theories of Plato, till the Bear or the polar star disappears. Let me by these studies learn to what regions the soul betakes itself after leaving this body which is composed of flesh. Let me discover what those spirits are that are said to be be found in fire, air, earth and water, and which in concert with the planets rule the destinies of man. Sometimes let me read some splendid tragedy, which treats either of the mournful tale of the Theban sovereigns, or of Pelops' line, or represents the sad event that befel Troy. Or let me read some modern tragedy if there be any, which becomes the stage. O! melancholy! thou sad virgin! thy influence is sufficient to animate afresh Musæus, or so enrapture the soul of Orpheus as to make him pour forth his music, which when accompanied with the instrument melted the heart of Pluto, and induced him to permit Orpheus to take back his wife, Eurydice.

A. Narrain Row.

Q. 5. What is the allusion in the words "in sceptered pall?" Name any of the ancient dramas which are founded on the events referred to in the following lines :—

> "Presenting Thebes' or Pelops' line,
> Or the tale of Troy divine."

State briefly the stories alluded to.

A. 5. In a tragedy, the subjects of the poem are generally individuals of the royal line, or of high families. In allusion to these characters, the poet uses the phrase "in sceptred pall."

A. Narrain Row.

Q. 6.. "Or what (though rare) of later age
Ennobled hath the buskined stage."

What is the allusion here and what is the meaning and origin of the term "buskined," as applied to the stage?

A. 6. Here the allusion seems to be made to Shakspeare's tragedies such, as, Julius Cæsar.

"Buskined" means, wearing buskins or high soled boots. The word "buskined" is applied to the stage, because it is a custom with the players on the stage to wear high soled boots.

A. Narrain Row.

Elphinstone Prize Essay.

Freedom for every man to apply his energies in the channel he considers most advantageous to himself, is essential to the prosperity of a country.

Wealth is essential to the prosperity of a country.

Among the various causes, which are conducive to the prosperity and happiness of a nation, Wealth appears to claim a distinguished rank. The influence it exercises on the progress of a nation is indeed very extensive; it is a fruitful source of many a national blessing. Nothing can be more absurd than to suppose, that discoveries and inventions will be made in the absence of wealth. It was the want of wealth that prevented Columbus, for a considerable time, from setting out on his voyage to discover the New World. In fact, discoveries and inventions, which are essential to the prosperity of a country, keep pace with the increase in the amount of national wealth. The possession of wealth naturally invites us to study and speculation. We know that it is among the wealthy portion of the community, that the human mind generally receives its best discipline and culture. Arts and sciences, which are in general the fruits of leisure, can never take any deep root in the dwellings of the poor. When we are continually pinched with hunger, it is impossible to direct our minds to all those studies which at once delight, adorn, and invigorate life; and the mind of man, without those studies, becomes barren, selfish, and contracted. In a country where poverty prevails, man, bound down by the considerations of self, scarcely has aspirations beyond those of the brute.

Labour is necessary to procure wealth.

Having, by the foregoing observations, attempted to show, that wealth is essential to the prosperity of a country, the question, that may naturally suggest itself to the reader, is how to acquire this wealth which is so much calculated to raise the moral, as well as the social condition of mankind. The fundamental principle on which is raised the whole science of Political Economy is, that labour is the source and origin of all wealth. And the answer to the next question how to render the labour of man most productive to his use and happiness, directly brings us in contact with the subject before us.

And in order to render labour most productive Freedom for every man to apply his energies, &c. is essential.

Now, the great cause of the increase in the productive powers of labour, is found to consist in freedom of industry, or in other words in allowing every man to apply his energies in the channel he considers most advantageous to himself; laws and governments having no other province than that of taking care, that any man in the pursuit of his own end in his own way, trenches not on the rights of his neighbour. It is no exaggeration to say, that an unlimited freedom of industry is every thing to a country. This freedom seems to be a necessary condition of man's life and activity. All the astonishing inventions and mercantile enterprises, which characterize the European states, may justly be attributed to this freedom. All those countries which enjoy an unlimited freedom of industry, are fast advancing in civilization and generally take the lead in discoveries and inventions. England and America may be mentioned as examples to prove the truth of this assertion. It is a characteristic boast of England, that she enjoys this freedom in an eminent degree. It is this freedom that has stimulated her energies, directed her views to laudable enterprises and converted her land naturally barren, into the most fertile fields. In a country where every man is allowed to follow his own interests in his own way, capital is employed in different branches of industry consequently the necessaries, conveniences, and luxuries of the community are greatly augmented. There, the trade is in a healthy state and the ingenuity of the people in every branch of industry, is carried to a very high pitch. Freedom of industry affords an extensive scope for the division of labour; and the advantages which we derive from the full development of this principle, are almost incalculable. It is folly to think that a country can ever advance in wealth and prosperity without enjoying freedom of industry. That every man should be allowed to apply his energies in his own way, provided he does not injure his neighbour, is one of the most important doctrines in the science of Political Philosophy. This may be considered the grand point on which the prosperity of a nation hinges. When rulers therefore, deny this freedom to their subjects they in fact destroy the very foundation of all national happiness: many of them seem to have thought, that in directing the labour of their subjects they studied the interest of their countries. In this they were egregiously mistaken. Any legislative interference except in the removal of restrictions upon freedom of industry, has always tended to repress the energies of man

and to retard his progress. In short freedom of industry when encouraged, gives rise in its progress to the institution of the various arts, trades, and professions, and thus creates that universal opulence which extends itself to the lowest ranks of the people.

The institution of Caste, puts a strong restraint upon the free choice of professions.

It is to be deeply lamented, that India does not enjoy this freedom in its full extent owing to the institution of Caste. This institution, it should be acknowledged, forms a material bar against all improvement. It binds down each individual to a particular profession and if any one finds that the employment marked out for him by his caste, is not congenial with his talent, he cannot without "losing his caste," follow any other employment which may lead him to fame and distinction. We have only to recollect the case of Sashiah. The public is probably aware, that this young man was educated in the High School and that in consequence of the liberal notions he imbibed there, he entered the medical line. The generality of his countrymen, instead of applauding him for his noble conduct, began to pronounce him as an out-caste and as an abominable villain. The rage of the orthodox Brahmins knew no bounds. All these may justly be attributed to the prejudices which the institution of caste has engendered. This institution, we must confess, is highly unfavourable to the spirit of enterprise and the efforts of inventive genius, Professions of various sorts can never spring up into existence when this great fortress of superstition is allowed to remain unshaken. Owing to the divisions of caste few of the inhabitants of India, are in what may be called *organic* condition that is, connected in the manner of true society. It is evident then that as long as this state of things exists in India, she can never hope to rise in the scale of civilized nations.

Reasons explained, why man should be left free except in those points where it is absolutely necessary to restrain him for the public advantage.

It may now be thought expedient to show in the first place, why any legislative interference in the way of restrictions upon the free action of man, is unjust and unnatural: in the second place, why it is unnecessary, and in the third, why it is impolitic.

First, why it is unjust and unnatural? Man is formed a progressive being and as such he is never satisfied with a fixed limit and condition. In fact it is this peculiarity in his constitution that gives him such a pre-eminent position in the vast Creation. This grand

distinction between man and the brute cannot be better depicted than in the words of Young:

> " Reason progressive, instinct is complete ;
> Swift instinct leaps, slow reason feebly climbs.
> Brutes soon their zenith reach ; their little all
> Flows in at once, in ages they no more
> Could know, or do, or covet, or, enjoy."

The sphere in which man is destined to move is infinite in extent. In short when we reflect upon the amazing progress he has made from being a mere savage, we shall be justified in indulging a belief that in the course of a few centuries to come, he will attain almost to a divine perfection. Hence it is obvious, that all governments and all legislative bodies, which attempt to thwart man's natural course, or to arrest his progress at a particular point, are unnatural and unjust.

Secondly, why it is unnecessary ?

It is universally admitted, that every man is instinctively actuated by an irresistible desire of improving his own condition and of rising in the world. This desire seems to be, the basis, the centre, and the leading principle of human life. In this the life is seized in its inmost core. It is this animating principle in man's breast, that induces him to expose himself to many an appalling danger. He commits himself to the mercy of the winds and waves for thousands of days together, when he sees around him nothing but his horizon and a large expanse of water. He subjects himself to all the rigours of tropical and friged zones ; he bears hunger, fatigue and all the miseries of life in foreign and distant climes. Dangers and difficulties in many instances, instead of discouraging him, only tend to call forth all his energies and fortitude. When he finds that he cannot improve his condition in his own country, he does not hesitate to quit it for a foreign one. Now, let us pause and reflect. It can never be doubted, that the hidden spring of all these deeds, is that *ambition* in every man's breast to improve his own condition. Again, while others of God's creatures are observed to yield obedience to instinct, man alone is endowed with reason which is emphatically called " his guardian angel and his god." The possession of this faculty enables him to think correctly and draw in general right conclusions. Every man of sane mind is therefore capable of learning the best possible way of promoting his own interests without the interference of any government or legislative body.

Extracts from Essays composed by members of the Lower Ranks of the 4th Class.

Subject the same as that of Sevagooroo's Essay.

Individuals in Society are governed by two sets of interests, that are scarcely reconcileable to each other, namely, social interests and private interests. And it is an incontestible truth that every man is by far more considerably influenced by such interests as concern himself or that political section of the people to which he is attached. This ascendancy of private interest has been stigmatized by superficial men as a degrading doctrine. But from the philosophy of history, we learn that the prevalence of self-interest in the bosom of man is highly advantageous to the human race, and eventually conduces to the promotion of national prosperity. This desire to look after ones own interest is the main spring of every human action and indirectly spreads blessings among the society at large. Such a principle which has for its object the good of millions ought to be encouraged by Governments, as a matter of duty as well as of political benevolence.

It is the duty of every good Government to afford all possible encouragement to the creation of wealth; this object can be accomplished only by stimulating the powers of the mind to the greatest energy, and by allowing labour to reap the most considerable advantage that may be within its reach, and at which it aspires. It is not unfrequent that the ruling body influenced by private motives or led away by ignorance, deviates from the main purpose which it is bound to keep always in view. Some politicians though possessed of minds bent towards the public good, fall into unhappy errors, while others prefer private interests and employ sophisms to deceive the people into an acquiescence with their measures. The people are furnished with a simple method for testing the propriety of political measures. They have only to ask, in what way does a certain line of policy contribute to ensure the greatest happiness to the greatest number of subjects. Then truth stands forth disencumbered of all prejudice and ignorance, while errors become clearly visible though concealed under a thousand coverings.

Besides the frequency of misgovernment the natural apathy of the people to innovations however beneficial they may promise to prove in the results, and their inalienable attachment to the institutions of antiquity, tend either to keep civilization in a state of stagnancy or

cause the retrogradation of society in refinement and manners. A restriction on the free exercise of human energies comes undoubtedly under the class of political fallacies, and it therefore entails upon nations such miseries as impede their progress in civilization.

A. Narrain Row.

There is a fourth important point to which the utmost attention must be paid by the Government. In all the human pursuits, self-interest is predominant. This principle is implanted in the breast of man by providence for the best and most useful of purposes. It animates him and inspires him with zeal and ardour. It obliges him to fly from inertia to action. Swayed by its powerful influence and guided by the knowledge with which the mind is stored, the individual launches himself forth in the sea of enterprise and swims across it with the greatest possible security. Hence every man is the best judge of what conduces to his own welfare; and when freedom is allowed to act in conjunction with self-interest, personal advantage is considerably augmented and the public advantage is the consequence. That public advantage must spring from individual advantage may at first sight appear paradoxical; but a due reflection will convince us of the truth of our assertion, since self-interest is the main spring of all the actions of men, it urges them to prosecute those branches of industry which are most beneficial to them and to swell the mass of enjoyments which they stand in need of. A desire to possess these enjoyments impels other men to apply their energies in channels which benefit them most and at the same time satisfy the wants of another order of men in Society. Thus a division of labour is introduced and the country is one scene of active industry. The comforts, conveniences, and luxuries of life are considerably augmented. Arts and Sciences are cultivated with assiduity and attain their meridian strength and splendour; inventions and improvements in machinery are multiplied; and natural agents are subdued and made to perform processess which are wonderfully great. Now since national happiness is nothing more than the aggregate of individual happiness, it necessarily follows that, that country is in a state of opulence and prosperity, where all the events enumerated above crowd upon one another.

Hitherto we have endeavoured to show why all governments are bound to respect this principle: let us now proceed to examine a few of those erroneous notions which led different countries to re-

strain its free operation, and the consequences that flowed from such a restriction. Nothing has contributed more to impoverish a country than a fictitious importance that was attached to the precious metals by some nations. Gold and silver, being used as the standard for measuring the value of commodities, were regarded as constituting the true wealth of a country. The idea of their serving only as convenient media of exchange was unknown in those periods. Consequently severe restrictions were laid upon their exportation, the only expedient that could be adopted by Governments for supplying the wants of the home population during the season of scarcity. An example illustrating this political hallucination is to be found in the history of Spain. This country so long as she encouraged the industry of her population, was opulent and prosperous ; but as soon as the precious metals began to flow from her American dominions, her industry was paralized and she retrograded in the career of wealth (in the proper sense of the term) and civilization. Secondly, the granting of patents exercises an injurious influence on the progress of industry and is pernicious to the interests of the community. When certain individuals monopolize any one branch of Industry, free competition is prevented from exercising its beneficial operations, the commodities are sold at a very high price and the poorer classes suffer most grievously. This system was carried to a most oppressive height during the time of Elizabeth who was most jealous of her prerogatives. It raised discontents among the people and was not finally abolished till the reign of James I. Thirdly, the impolitic interference of the legislature in the enhanced price of commodities during a scarcity of provisions, produces effects no less injurious than those of the former. The dealers in corn and other provisions being forced to sell their goods at a diminished price, the poorer classes increase their consumption ; and what will last till the ensuing harvest lasts only for a short period. The consequence is famine, whose dreadful ravages carry off the inhabitants by thousands. Thus, we see that Governments destitute of sound principles are instrumental in accelerating the ruin of their people. It is therefore highly necessary that, for the eradication of established errors and prejudices, and for the propagation of correct notions, they should make themselves masters of the Science of Political Economy whose domain extends over the causes that contribute to the happiness or misery of a nation.

C. Terroovengadum.

REPORT OF THE EXAMINERS.

Report on Smyth's Lectures.

Questions.	1	2	3	4	5	6	7	8	Total.
Value.	10	9	8	8	3	4	8	4	54
Names.									
T. Durmaroyen,.....	10	8	4	4	2	1	3	—	32
Teroomala Row,.....	7	5	5	5	1	2	4	2	31
M. Sevagooroo,.....	7	7	3	3	1	3	2	2	28
A. Streenevassa Row,....	7	4	2	2	1	2	2	—	20
D. Teagiah,.....	7	4	2	2	1	2	1	—	19
P. Soondarum.....	7	—	3	3	3	—	2	1	19

The above table shows the result of the examination. On a former occasion I had to complain of the boys not having confined their attention to the question; but of having foisted in a good deal of matter true enough in itself, but not pertinent to the answer. On the present occasion I requested the Head Master to inform the boys that I should attach much more value to an answer however short

wholly relevant to the question, than to a longer one which had not that merit. The consequence has been that the boys have answered on the present occasion much in the way I wished them; and their answers are free from the error I had to point out on a former year.

A reference to the questions will show that they were few in number, and of no very great scope. Considering therefore that three hours were given the boys, and they were informed that they were not to wander into irrelevant matter, I should have been better pleased if their answers had exhibited somewhat more of the ordinary graces of composition. Among them all there is not one, who can lay claim to a style that is not puerile, bald and feeble; while the questions, the character of Washington, the arguments of Grenville and Pitt are certainly such as to afford ample room and verge enough for strength or ornament according to the writer's taste. I cannot recommend the publication of any of the answers.

27th December. (Signed) J. B. Norton.

P. S. I think it only fair to add that the lads passed a very fair vivâ voce examination in this.

Reports on the Shakspeare papers.

I have arranged the names of the lads examined in Shakspeare in the following order. 1. M. Seevagooroo. 2. T. Durmaroyen. 3. Teroomala Row. 4. A. Streenevassa Row. 5. D. Teagiah. 6. P. Soondarum.

The answers on the whole show a knowledge of the details of the play. As to the time when it was written, (a vexed question) although the numbers declare for the reign of Elizabeth, the ingenuity seems on the side of that of James.

I am disappointed in the paraphrases of the passage given. The boys have explained away, not explained, the metaphorical language of the Poet.

The meaning of the sentences put before the boys has been throughout well given, with the exception of the last one, in which all seem to me to have failed.

The carefulness and study with which the play has been read are evident throughout, and highly creditable to the pupils.

(Signed) EDWARD SALMON.

January 19th, 1842.

Questions.	1	2	3	4	5	6	7	8	9	10	11	Total.	
Value.	6	6	10	8	10	4	10	6	8	6	10	84	
Names.													
M. Sevagooroo.....	1	—	8	2	8	2	6	2	5	3	4	41	2
T. Teroomala Row....	4	—	2	—	4	4	6	1	6	3	7	37	4
P. Soondarum.....	4	1	0	—	4	—	4	4	—	—	2	19	6
A. Streenevassa Row...	3	—	8	—	10	4	5	—	6	2	2	40	3
D. Teagiah.....	0	—	2	—	3	4	5	—	6	4	5	30	5
T. Durmaroyen.....	2	3	8	2	6	2	6	1	7	3	4	44	1

Being requested to give my opinion upon the boys' merits in consequence of the absence of Mr. Salmon, I have done so according to the best of my abilities.

I have not arrived at the same result as Mr. Salmon: which may possibly be owing to my not having attached the same values to the questions as he did; and it is to be remembered that as he set the questions he is probably the best judge of this, and I think his Report should be published as well as mine.

I am inclined to agree with him as to Sevagooroo being entitled to the first place; as I think his paper is on the whole better than Durmaroyen's, notwithstanding Durmaroyen's having obtained the highest number. It will be observed that had M. Seevagooro answered question No. 2 their numbers would have been equal and as Mr. Salmon has decided in his favor, I give it also for him; and think his paper may be published.

I have but few remarks to make. The examination shows the boys have carefully read the play; and I can testify to their having passed a highly satisfactory vivâ voce examination in it.

I would venture to bring to the notice of the Head Master a matter which I have dwelt on in former reports. I do not think the boys practically understand the difference between "explanation" and "paraphrase." Questions 7 and 9 draw the marked distinction; and although I think their answer to question 9 shows a marked improvement in paraphrasing, yet their answers to question 7 are more paraphrases than explanations. There is, I believe, but one way of teaching this lesson well; and that is by frequently setting the boys as tasks or exercises short portions to be explained or paraphrased, and afterwards going carefully over it with them in school, showing them where they have failed, and teaching them the exact value of each word. I fear there is scarcely time for so tedious a process in the multiplicity of school business: if it could be accomplished I think very much good of a practical nature would result.

(Signed) J. B. Norton.

28*th January*, 1852.

Report on Mental Philosophy.

Questions.	1	2	3	4	5	6	7	8	9	Total.
Value.	12	12	4	8	10	4	6	10	6	72
Names.										
T. Teeroomala Row.....	8	—	2	6	6	3	2	6	5	36
T. Durmaroyen.....	9	—	2	6	5	2	1	3	3	31
D. Teagiah.....	7	4	3	5	3	2	2	—	4	28
M. Sevagooroo.....	7	—	2	5	2	2	4	4	3	29
A. Streenevassa Row.....	5	—	2	4	3	2	—	1	3	20
P. Soondarum.....	5	—	2	3	2	2	1	—	4	19

The above table shows the result of the examination in Abercrom-

bie on the Intellectual Powers. I have paid the greatest possible attention in framing the questions, assigning them their value, and in weighing the answers of the boys.

I have no doubt that all the time and care which could be allotted to this study have been devoted to it. And I give credit to the boys for having given their best attention to the masters: but after making allowances for all this I am not satisfied with the result; nor do I think that any unbiassed person would be. Taking the best of the boys, Teroomala Row, it will be seen that in those questions only has he succeeded, where the quality of the answer must depend rather on the memory than the understanding. For instance when he is asked to collect certain rules for investigation, to state the chief first truths, to give the methods by which memory may be cultivated, his answers are satisfactory; and evince a good memory, and much care and labor bestowed upon his study. But the moment the questions take a turn which require reflection, thought, intellect, he and the others are at fault. For instance in the second question, the difference between Idealism and Materialism, although he has gone into a long answer, I have been compelled to refrain from giving him any mark; because the conclusion I have come to is that he really does not understand what he is talking about. Those parts which are sensible are in the very words of the text and a mere matter of memory: the moment he trusts to himself he flounders. So of the other boys. This is the first time that I have examined in Mental Philosophy, and I confess that I am not surprised at the result. I have always doubted much whether it is not a subject beyond the boys, taking into consideration all the difficulties with which they have to struggle, nor do I think Abercrombie a good school-book. True it is a anecdotical volume, and so far calculated to amuse and interest the students; but it is a resume of certain well known and conceded principles in the science: easy enough for those who have already mastered the Philosophy of the mind; but which is unsuited for beginners from the very circumstance of its assuming so much as known: and I believe it to be utterly impossible in the hurry of a school-room, and in the very short space of time necessarily devoted to this study for any master to make six Hindu Youths really understand the science.

I would in conclusion draw attention to the very unsatisfactory

character of the boys' hand-writing, considering that they have now passed through the school, it ought to be very different to what it is.

(Signed) J. B. NORTON.

27th December.

Report on Russell's Modern Europe.

To

The Head Master of the High School.

SIR,

I have the honor to transmit my report on the examination of the 2d Rank of the 4th Class in the portions of Russell's Modern Europe studied by them during the past year.

This rank of the 4th class consisted of six scholars whom I have classified as follows :—

1. A. Narrain Row.
2. C. Teroovengadum.
3. T. Sakaujee Row.
4. A. Dique.
5. S. Nadamoony.
6. S. Balakistnah.

The merits of A. Narrain Row and C. Teroovengadum are very nearly on a par, but as the former has slightly the advantage I have placed him first. The answers of all the six scholars and especially of the first three show that they have studied industriously and that so far as the cultivation of their memories is concerned their studies have been attended with very tolerable success.

Some of the questions were somewhat comprehensive and required the exercise of the thinking powers, as well as of the mere memory, in order to a clear statement of the more prominent facts and the omission of unimportant details. The answers to these questions are not, I think, so satisfactory as might be expected, considering the ages of the writers and their standing in the school.

In some instances the manner in which they have adopted the very words of their text books is very remarkable. This perhaps is naturally to be expected from young Students when the works studied by them are in a language not their own; but it shows how entirely they trust to their memories, and that as yet their reasoning powers have been but little exercised.

I cannot conclude without observing that Russell's Modern Europe is a work by no means calculated for the study of History as it ought to be studied. It abounds in details, compressed together, in many places without much arrangement, and is probably of all the books commonly used in Schools the one most calculated to bring about the defects I have alluded to in the answers above referred to. I am aware that there is no other work to supply its place; a want which I cannot but think is very much to be regretted especially in the case of Native Students. The number of events and names crowded together in a few pages in the history of the Thirty years' war is sufficiently illustrative of the evil to which I refer, and of the difficulty a Native Student must experience in studying the book with profit.

I have the honor to be,
Sir,
Your most obedient Servant,
(Signed) A. J. Arbuthnot.

Madras,
23*rd January*, 1852.

Report on Political Economy.

To

The Head Master of the High School.

Sir,

I have the honor to report on the examination in Political Economy of the scholars comprising the 2d rank of the 4th class whom I have classified as follows:

1. A. Narrain Row.
2. T. Sakaujee Row.
3. C. Teroovengadum.
4. A. Dique.
5. S. Nadamoony.
6. S. Balakistnah.

The answers appear to me to be generally satisfactory, and to evince a very fair knowledge of the matter of the subject studied. In point of expression many of the answers are superior to those given on the same subject in former years, if I may judge by the published reports. There is still however much room for improvement in this respect.

I have the honor to be,

Sir,

Your most obedient servant,

(Signed) A. J. ARBUTHNOT.

MADRAS,
February 2d, 1852.

Report on English Poetry.

To

The Head Master of the High School.

SIR,

In the examination of the 2d Rank of the 4th class in English Poetry, the following classification exhibits the respective merits of the six scholars forming that Rank.

	No. of Marks.
1. C. Teeroovengadum..	45
2. A. Narrain Row.....	38
3. T. Sakaujee Row.....	31
4. A. Dique.....	29
5. S. Nadamoony.....	27
6. S. Balakistnah.....	21

The number of marks assigned for perfect answers to the paper given on this subject was 81—of which the highest number attained is little more than one half. In most of the questions however to attain the full number of marks assigned would have required a knowledge of the niceties of the English language scarcely to be expected from native youths of the age of those examined, and on the whole I consider the result of the examination to be tolerably satisfactory. Their paraphrases of the passages selected for that purpose are tolerably free from error and show that they understand

what they have been reading, while their answers on points of history and mythology are better than might be expected from youths whose studies in Ancient History must as yet have been somewhat limited.

I have the honor to be,

Sir,

Your most obedient servant,

MADRAS,
11*th February*, 1852.

(Signed) A. J. ARBUTHNOT.

Report on Tamil.

To

The Secretary to the High School.

SIR,

Having been directed by Government to assist at the Annual Examination in Tamil, which took place December 19th, 1851, I have the honor, to report that the number of scholars examined vivâ voce was eighty-six. The written exercises were completed the following day.

The vivâ voce Examination lasted from 11 A. M. to half past 4 P. M. and comprised portions from the following works:

LOWER CLASSES.

Rhenius' Introductory Tamil Grammar.
Mahalingum's Elementary Grammar.
Kathei-munjery Tales.
Puncha Tuntrum. (Parts I. and II)

UPPER CLASSES.

Tandavaroya Moodely's Tamil Grammar.
The Nunnool.
Robertson's Selections.
The Kural (chapter 25-37 and 51-64).

The examination was conducted in Tamil, with the exception of

some questions to those scholars of the Upper class who expressed a readipess to undertake such replies as admitted of it in English.

The vivâ voce examination was very satisfactory, and I was glad to observe that great pains had evidently been taken with the younger boys and I would notice especially the readiness of the scholars of the 3d class, upper rank, in Tondavaroya Moodely's Grammar.

The written exercises consisted of

I. A Tamil Essay on the use of the study of history.

II. A passage from Robertson's Ancient India to be rendered into Tamil

III. A page of "Malcolm's Central India" to be rendered into Tamil without the introduction of high Tamil words.

IV. A portion of the prose version of the Maha Barat to be translated into English.

As no Tamil poetry is read in the High School (except the text of the Nunnool Grammar) I did not on this occasion give any exercises of that kind, having found that the scholars were unable to give the meaning of the passages from poems familiar by rote to most of the Native Community. Indeed time would not admit of their studies in Tamil extending beyond the Grammar (which embraces much more than the English acceptation of the terms admits) and a few standard prose works.

None of the Essays were such as to justify any translation of them as out of the ordinary course, but as the style of the Tamil was the chief point of importance, I would observe that those composed by the Scholars named in the margin were very creditable.[1]

(1.) V. Rajahgopaul.
C. Teeroovengadum.
M. Rajahruthnum.
P. Soondarum.

Exercise No. II. required a considerable knowledge of English. The best translations are by the Scholars named in the margin.[2]

(2.) P. Soondarum.
M. Seevagooroo.
T. Durmaroyen.
C. Teeroovengadum.

Exercise No. III. was less difficult. The 3 best were those named in the margin.[3]

(3.) M. Rajahruthnum.
Streenevassooloo.
Allagasingum.

(4.) C. Teeroovengadum.
M. Seevagooroo.
P. Soondarum.
T. Mootoosawmy.
T. Rungasawmy.
T. Durmaroyen.
F. Gopaulkistnah.
S. Nadamoony.

Exercise No. IV. was attempted by several, and generally very creditably performed. The 8 best are named in the margin.(4)

These written exercises (except the Essays partly) do not of course show who is the best Tamil Scholar, for much depends upon the knowledge of English: yet they are not without their value as tests of general qualification, and they are much better written and better spelt than they were last year.

The general result of the examination was satisfactory. It would be hardly fair to judge of the method of Native teaching by the standard of modern European systems, but it appears to me that under the management of Vizagaparoomaul Iyer, that the Native method has been made as efficacious in imparting a critical knowledge of the language as it possibly can be. The time allowed for Tamil studies is not sufficient to produce any Scholastic knowledge, beyond that of the particular books that form the course, but in these they are well grounded, and it is due to Vizagaparoomaul Iyer to observe that he has introduced the plan of oral cross-questioning in terms *not* after the set form and phraseology of the text books themselves. This in itself is a great improvement on the usual Native system—he has also repudiated the very general practice in Native Schools of making the boys learn by rote without requiring them to understand what they repeat. If these principles are followed out, and others of the like nature which a mind not hampered by the prejudices of antiquity will suggest, the result must be to the Scholars a more sound and practical knowledge of their own tongue.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) W. H. Bayley,
Tamil Translator to Government.

Fort St. George,
Tamil Translator's Office,
15*th January*, 1852.

Report on Telugu.

The highest (fourth) class were examined in the Manu Charitra, a classical Telugu poem, not easy in style, and have studied very

successfully. When examined in the Ordinary dialect, of Telugu correspondence, their success was creditable. This is the only profitable portion of their studies. They are still taught a variety of grammatical refinements which are laborious and unprofitable.

The next (third) class were chiefly examined, by their own tutors, in refined points of Telugu Grammar which merely exercise the memory, and are of no avail. Such things are merely taught for the purpose of display. But the boys have worked diligently, and the tutors have attended carefully to their duty. I only blame the system, which neglects utility for mere laborious and fruitless exercise of memory.

Three medical pupils appear in this class. They are but beginners in learning.

The two lowest classes (2d and 1st) were examined in the Puncha Tantram by the Tutors, and had but moderate success.

The 4th class consist of 14 boys and the 3d class of 13. Eight of the former and only four of the latter amounting in all to 12, did the exercises from English into Telugu and vice versa. They stand in the following order according to their merit.

FOURTH CLASS.

No. 185 A. Sri Nivas Rao.
„ 628 B. Gopalaya.
„ 249 A. Narayana Rao.
„ 300 T. Sacaji Rao.

As regards Translation from English the second and third (628 and 249) of these change places.

607 P. Vurda Chari.
674 K. Sri Nivasa Chari.
365 P. Vencatakristnama.

THIRD CLASS.

559 A. Ratnaswami.
557 P. Chinna Tambi.
702 Bhagavaut Ram.
292 P. Partha Saradhi
292 C. Vencatapati.

Only three of the 26 merit notice as regards their skill in writing Telugu from dictation.

No. 760 C. Vencat Ramaya.
„ 611 C. Narayanaya.
G. Vencat Rungum.

It is particularly to be observed that on this, as on former occasions both the pupils and the tutors complain that too short a part of each week is allowed for the study of Telugu. Considering the difficulties in their way I think the boys have done well.

(Signed) C. P. Brown,
Telugu Translator to Government.

Madras,
29*th December*, 1851.

Report on Mahratta.

From

Major J. Crisp,
Mahratta Translator to Government.

To

A. J. Arbuthnot, Esq.,
Secretary Madras University.

Sir,

1. For the information of the President and Governors of the Madras University, I have the honor to submit the following Report on the late examination in Mahratta of the Students of that language belonging to the High School.

2. The Examination was conducted by me on the 19th Ultimo, assisted by the Moonshee Kristnah Row of the Mahratta Translator's Department, the written exercises and the vivâ voce having been gone through the same day.

3. The number of students of Mahratta examined was 29, divided into four classes; of whom seven undertook to make translations as

well from Mahratta into English as from English into Mahratta. Not one of the translations is entirely without faults, and there is none of them very much superior to the rest, though they are, of course, of different degrees of merit

4. The exercises were as follows :—

1st. Translated from English into Mahratta 33 lines (Manuscript) from the Duke of Wellington's dispatches page 436; and 23 lines (Manuscript) select sentences.

2d. Translated from Mahratta into English 18 lines (Print) from Grant Duff's Mahratta History Pages 81 and 82; and 17 lines (Print) from Balamitra.

From English into Mahratta.	From Mahratta into English
1. Ramachunder Row, T.	1 Ramachunder Row, T.
2 Teroomala Row, T.	2 Narasimhaloo Naidoo,
3. Teagiah, D.	3 Sashachellum, G.
4 Sashachellum, G.	4 Teroomala Row, T.
5. Narasimhaloo Naidoo,	5. Teagiah, D.
6. Ramiah, C.	6. Ramiah, C.
7. Vencatasawmy Naidoo,	7 Vencatsawmy Naidoo,

Reading sentences from Mahratta Books, and explaining the meaning of them, and answering questions in Mahratta Grammar

4th Class.	*1st Class.*
1. Ramachunder Row, T	1 Rungasawmy A
2 Sashachellum, G.	2. Arathoon, A.
3 Teroomala Row, T.	3. Meer Abbas,
4. Teagiah, D.	4. Valayoothen, R.
5. Narasimhaloo Naidoo, P	5. Vencatasawmy, P
3rd Class.	6 Parthasarady, J. C.
1. Ramiah, C.	7. Colundavaloo, M.
2. Vencatasawmy Naidoo, M	8. Ponnoosawmy, P.
3. Vencata Row, H.	9. Armoogum, M.
4 Arnagherry, C.	10 Parthasarady, P.
5 SoobooroyoolooNaidoo, M.	11. Streenevassaloo, T.
6 Ramasawmy Naidoo, N.	12. Mootoosawmy,
7. Gungagee Row,	13. Ragoopathy, T.
2nd Class.	
1. Govindoo Row, A	
2. Balajee Row, C	
3. Parthasarady, P.	
4 Parthasarady, C.	

The names of the Translators are noted in the margin in order according to their respective merits, and all the papers containing their translations are transmitted herewith.

5. The result of the vivâ voce examination was satisfactory.

The names of the Students examined are inserted in the margin in order according to the merit of their respective performances.

6. In eliciting answers to the questions put to the Hindu Students of the lower classes their own mother-tongue was employed, as none

of them were sufficiently conversant with the English to make that language the medium of our communication.

7. Upon the whole, I consider this examination satisfactory. There are no first rate Mahratta Scholars in the High School at present, but all the Students examined appear to have made progress according to their several ages and standing, and all seem to have paid due attention to the subjects on which they were examined, and their proficiency tested.

I have the honor to be, &c.

(Signed) JOHN CRISP,

Mahratta Translator to Government.

MADRAS MAHRATTA TRANSLATOR'S OFFICE,
15*th January*, 1852.

Abstract Account of the Actual Disbursements of the Madras University, during the last six months of the official year 1850-51, *or from* 1*st November,* 1850, *to* 30*th April,* 1851.

	Rs.	A.	P.	Rs.	A.	P.
High School.						
Amount paid the Establishment including the Secretary's Department and Government Scholarships, from 1st November 1850, to 30th April, 1851, - - -	14,085	0	0			
House-Rent from do. to do.	1,260	0	0			
				15,345	0	0
Contingent Charges.						
Books and Book-binding, - -	238	13	10			
Furniture, - - - - - -	25	0	0			
Printing, - - - - - -	82	5	0			
Stationery, - - - - -	218	10	4			
Sundries, - - - - - -	225	10	6			
Elphinstone Endowed Scholarship,	72	0	0			
				862	7	8
				16,207	7	8
Deduct.						
School-Fees realized during the above period, - - - - -	3,058	0	0			
Amount of Interest realized at different periods on Elphinstone Endowment Bonds in the Madras Bank, - - - - - -	127	6	6			
				3,185	6	6
Net Amount of Expenditure, - -	....	..	..	13,022	1	2

Madras University,
10*th May,* 1851.

Abstract showing the Advances received from Government on account of the Madras University from 1st November, 1850, to 30th April, 1851, Actual Disbursements during the same period, and the balance of Cash remaining on the 30th April, 1851.

	Rs.	A.	P.	Rs.	A.	P.
Balance of Cash on the 31st October, 1850, appropriable to Disbursements of the year, - - -	11,283	0	5			
Amount of advance received under orders of Government, dated 17th February, 1851, - - -	10,000	0	0			
				21,283	0	5
DEDUCT.						
Disbursements as per Abstract Account from 1st November, 1850, to 30th April, 1851, - - -	.....	..	..	13,022	1	2
Balance of Cash on the 30th April, 1851, appropriable to future Disbursements, - - - - -	.....	..	..	8,260	15	3

Errors Excepted,

(Signed) A. J. ARBUTHNOT,

Secretary.

Abstract Account of the Actual Disbursements of the Madras University during the first six months of the official year 1851-52, *or from* 1*st May, to* 31*st October*, 1851.

	Rs.	A.	P.	Rs.	A.	P.
HIGH SCHOOL.						
Amount paid the Establishment including the Secretary's Department and Government Scholarships, from 1st May to 31st October, 1851, -	13,994	0	6			
House-Rent from do. to do.	1,260	0	0			
				15,254	0	6
CONTINGENT CHARGES.						
Books and Book-binding, - -	391	11	7			
Furniture, - - - - - -	14	12	0			
Printing, - - - - - -	297	2	3			
Stationery, - - - - - -	288	10	4			
Sundries, - - - - - -	351	9	5			
Elphinstone Endowed Scholarship,	72	0	0			
				1,415	13	7
				16,669	14	1
DEDUCT.						
School-Fees realized during the above period, - - - - - -	3,012	0	0			
Amount realized for books lost by Scholars, - - - - -	14	2	0			
Amount realized for Tatts sold, -	1	0	0			
Amount of Interest realized at different periods on Elphinstone Endowment Bonds in the Madras Bank, - - - - - -	107	7	0			
				3,134	9	0
Net Amount of Expenditure, - -	.....	...	...	13,535	5	1

MADRAS UNIVERSITY,
20th November, 1851.

Abstract showing the Advances received from Government on account of the Madras University from 1st May to 31st October, 1851, Actual Disbursements during the same period, and the Balance of Cash remaining on the 31st October, 1851.

	Rs.	A.	P.	Rs.	A.	P.
Balance of Cash on the 30th April, 1851, appropriable to Disbursements of the year, - - - -	8,260	15	3			
Amount of advance received under orders of Government, dated 17th June 1851, - - - - -	10,000	0	0			
				18,260	15	3
DEDUCT.						
Disbursements as per Abstract Account from 1st May to 31st October, 1851, - - - - - -	.....	..	...	13,535	5	1
Balance of Cash on the 31st October, 1851, appropriable to future Disbursements, - - - - -	.....	...	..	4,725	10	2

Errors Excepted,

(Signed) A. J. ARBUTHNOT,
Secretary.

LIST OF PROFICIENTS OF THE HIGH SCHOOL UP TO 31st MARCH, 1852.

NAMES.	Degree.	Date of Degree.	Age at the date of Degree.		Time in High School.		Present Employment.	Salary.	REMARKS.
C. RUNGANATHUM SHASTRY,..	1st Proficient,	20th May, 1842,	23	0	1	0	Head Interpreter Supreme Court.	Rs 245 exclusive of Fees.	This Proficient studied in the High School till July, 1841.
P. THENATHYALOO NAIDOO,...	do.	26th April, 1845,	19	0	4	0	Second Judge's Clerk Small Cause Court.	Rs. 70	This Proficient studied in the High School till June, 1846.
T. MADAVAH ROW,.....	do.	21st April, 1846,	18	0	5	0	Tutor to the young Princes of Travancore,	Rs. 200	
MR. B. LOVERY,.....	do.	do.	19	0	5	0	Principal of Pacheappah's School.	Rs. 150	
A. SASHIAH SHASTRY,.....	do.	12th June, 1848,	20	0	7	0	Thasildar,	Rs. 100	This Proficient obtained the Pacheappah's Vernacular Prizes of 1846-47 for Tamil Expositions of Arnold's 3d Lecture on Modern History, and 10th and 11th of Thornton's Chaps. on British India; also the 1st Government reward of 300 Rupees given by the Council of Education in 1847; and also Lord Elphinstone's Prize for an English Essay in 1847.
V. RAMANOOJAH CHARRY,....	do.	do.	20	0	7	0	No Employment.		
C. RUNGA CHARRY,.....	do.	16th April, 1849,	19	0	6	0	Translator to the Collector of Chingleput.	Rs. 85	This Proficient obtained Lord Elphinstone's Prize for an English Essay in 1849.
V. SADAGOPAH CHARRY.....	2d Proficient,	26th April, 1845,	18	0	4	0	Deputy Translator Sudr Court.	Rs. 80	The Pacheappah's Vernacular Prize for 1844 was shared between these 3 Proficients for Expositions of Hume's Essay on Commerce and Whately's Money Matters.
M. SADASEVA PILLAY.....	do.	do.	17	0	5	6	Translator Collector's Cutcherry Cuddalore.	Rs. 70	In addition to the above M. Sadasevah Pillay obtained the Pacheappah's Vernacular Prize of 1845 for a Tamil Exposition of Abercrombie's culture and discipline of the mind.
V. RAMYENGAR.....	do.	do.	17	0	4	0	Head Javob Neviss [illegible]	Rs. 85	

G. CHUNGUNNAH SHASTRY,...	do	12th June, 1848,	22	0	6	0	Deputy Accountant Chingleput,	Rs. 70	This Proficient obtained Pacheappah's Vernacular Prize of 1848 for a Telugu Exposition of Chapter 10, Vol. 1st Murray's India also the 3d Government reward of 200 Rupees given by the Council of Education in 1847, and also the Certificate of a College Moonshee in 1849
W SASHACHELLUM NAIDOO,..	do.	15th April, 1849,	22	0	7	0	Head Judge's Clerk Small Cause Court.	Rs. 70	
G. RAJAGOPAUL NAIDOO, ...	do	do	21	0	8	0	Second Master Pacheappah's School.	Rs. 40	
A RAMCHUNDER ROW,.....	do.	do.	19	0	8	0	Mahratta Translator Revenue Board.	Rs. 54	This Proficient obtained Pacheappah's Vernacular Prize for a Mahratta Exposition of Chapter 2, Vol. 2d Murray's India in 1849 *
T VENCATA CHARRY.....	do.	22d April, 1850,	22	6	5	6	do.	Rs. 42	
MR H. KERAKOOSE,.....	do.	do	22	0	7	0	Merchant.		
P. RUNGIAH NAIDOO, ...	do.	15th April, 1851,	22	0	9	0	Translator Small Cause Court	Rs. 35	
P. VEJIARUNGUM MOODELLY,	do	do.	20	0	5	0	Interpreter High School.	Rs. 55	This Proficient obtained Pacheappah's Vernacular Prize for a Tamil Exposition of Book 2d Robertson's History of America in 1851 +
D BABOO ROW,.....	3d Proficient	12th June, 1848,	18	0	6	9	No Employment.		In independent circumstances.
C. SAMA ROW,.....	do.	22d April, 1850,	20	0	8	0	Writer Commissary Gl.'s Office	Rs. 20	
J RUNGANATHUM MOODELLY,	do	do.	22	0	7	8	Assistant Clerk Small Cause Court.	Rs 20	
B KISTNASAWMY NAIDOO,	do.	do	20	0	6	0	Translator Session Court Salem.	Rs. 50	
S SOONDARUM NAIDOO, ...	do.	do	21	0	9	0	Translator Cutcherry Nellore	Rs. 35	

* This Exposition was published in 1850

+ This Exposition was published in 1852.

Scheme showing the average number of Scholars in the High School during the first ten years after its foundation, and the amount of fees collected in each year.

YEARLY PERIODS.	Average number of Scholars paid for by their parents or friends	Average number of Free Scholars paid for by the Trustees of Pacheappah's Charities.	Average number of Students holding Pacheappah's Endowed Scholarships and paying fees out of the same	Average number of Scholars for whom Government received fees.	Average number of Students holding Government or other Scholarships, and excused their fees	Average number of Scholars in the High School	Amount of fees paid by the parents or friends of Scholars	Amount of fees paid by the Trustees of Pacheappah Charities for the Free Scholars	Amount of fees paid by the Pacheappah's Endowed Scholars out of their stipends	Total amount of fees paid to Government
1st April, 1841, 31st May, 1842... . .	65	2	0	67	0	67	3064	76	0	3140
Do. 1842, do. 1843.. . .	95	14	0	109	0	109	3964	668	0	4632
Do. 1843, do. 1844... ...	79	27	1	107	1	108	3686	1364	24	5074
Do. 1844, do. 1845.....	75	22	6	103	9	112	3080	988	288	4356
Do. 1845, do 1846. ...	73	26	5	104	19	123	3146	1228	200	4574
Do. 1846, do 1847.....	103	27	6	136	21	157	4176	1284	222	5682
Do. 1847, do. 1848.....	103	29	6	138	20	158	4360	1344	260	5964
Do. 1848, do. 1849	111	25	6	142	18	160	4680	1192	252	6124
Do. 1849, do 1850... ..	114	30	5	149	18	167	4808	1420	252	6480
Do 1850, do. 1851. . .	117	23	5	145	20	165	4858	1068	240	6166

Rules for Lord Elphinstone's Endowment.

The sum of 4,200 Rupees having been offered to the Governors of the Madras University, on behalf of certain Members of the Hindoo Native Community of Madras, for the purpose of Founding an Endowment in the High School of that Institution in the name of the Founder Lord Elphinstone, and according to such Rules as they may deem most appropriate; and such sum having been accepted and invested for such object, the following Rules have been framed for establishing such Endowment.

1. The Endowment shall consist of a Scholarship to the amount of 12 Rupees per month, to be denominated "Lord Elphinstone's" Scholarship, and of an Annual Prize of a purse of 5 Gold Mohurs for the best English Essay, to be publicly read at the Anniversary, and to be denominated "Lord Elphinstone's Prize."

2. The Scholarship shall be bestowed upon a Hindoo Scholar of the first Class, to be selected by the Head Master as having shown the most distinguished merit at the Annual Public Examination; such selection to be confirmed by the Board of President and Governors.

3. The Scholarship shall be held for the period of 5 years, or until the Scholar attains his "Proficient's" degree.

4. No Scholar shall be selected except on the express understanding that he is to remain to take a "Proficient's" degree.

5. the Board shall have authority of deprivation in cases of negligence of studies, absence from School, or other misconduct.

6. "Lord Elphinstone's Prize" shall be awarded to a Hindoo Scholar of the 4th Class of not less than one year's standing in that class.

7. The subject for the Prize Essay shall be given out two months at least, and be delivered in two weeks at least before the Anniversary.

8. The text of the Essay shall not exceed 50 ordinary printed octavo pages, and may be less according to the nature of the subject.

9. The Head Master shall take precautions to prevent any communication between the Candidates and others during the time of actual composition: and the use of Books is prohibited, except with the previous knowledge of the Head Master of the Books to be consulted, and for the purpose of avowed reference or quotation, but not for the purpose of copying as part of the composition.

10. The Head Master shall be at liberty to recommend, but the selection of the Prize Essayist shall rest with the Board.

The Prize shall be publicly conferred on the day of the celebration of the Anniversary by the hands of the President, unless the Governor (or Member in Council presiding) shall be pleased, by his own hands, to confer it.

G. N. TAYLOR,
Acting Secretary.

Rules for Government Scholarships.

1. There shall be three classes of endowed "*Government Scholars.*"

2. The first class of Government Scholars shall be Members of the fourth (or highest) class of the High School. The second class shall be Members of the 3d class, and the third shall be Members of the 1st or 2d class of the School.

3. The Government Scholars of the first class, shall receive ten, those of the 2d seven, and those of the 3d five Rupees per mensem.

4. No School fees shall be paid by Government Scholars.

5. The selection of these Scholars shall be decided by open public competition, and on the results of the Annual Examination.

6. Upon any vacancies arising (after the first Scholars shall have been elected) public notice thereof shall be given by an affix in the respective class rooms; and candidates must give in their names to the Head Master two months before the 1st day of the next Annual Examination, and shall not be otherwise admissible as such, except under special circumstances and from special cause.

7. The Examiners shall elect, subject to the confirmation of the Board of the President and Governors of the University.

8. Each Scholarship shall be held for two years, or until the Scholar shall succeed to a vacancy in a higher class of the Scholarships, if the Scholar shall so long remain in the School; but if any Scholar of inferior stipend happens to be in a School class in which he is competent to hold the higher, he is at once to succeed to any vacancy arising therein, unless it shall be otherwise ordered by the Board for special cause.

9. The Board shall have authority of deprivation in cases of negligence in studies, absence from School, or misconduct.

G. N. TAYLOR,
Acting Secretary.

Amended Rules for Patchiappah's Endowments at the Madras University.

1. Patchiappah's endowment shall consist of "Studentships" of the Cellegiate Department, "Endowed Scholarships," and "Free Scholarships" of the High School.

2. As the Trustees of Patchiappah's charities have no power over the principal of their Funds, but at the same time it is expedient that a permanent provision be made for securing the stipends, a general resolution has been past by the Trustees whereby the sum of 2,500 Rupees is to be placed to the credit of the Madras University for the purpose of such stipends on 1st January each year. And a similar resolution is to be passed in case the number of Students or Scholars or stipends be hereafter increased.

3. All arrears, or sums accumulating from vacancies or other causes, shall be disposed of by the President and Governors of the University for the purpose of the endowment.

4. No Scholar "Endowed" or "Free" shall be admissible except on the express understanding that he is to remain to take a "Proficient's" degree.

5. It shall be the duty of all Patchiappah's Scholars, both "Endowed" and "Free," to attend at each annual celebration of Patchiappah's Founder's day, and there express in such public manner and form as the Trustees shall direct, their thanks for their appointment.

6. The president and Governors shall have power of deprivation in cases of negligence of studies, absences or other misconduct.

7. The "Studentships" shall be three, of 30 Rupees per mensem each; and the mode of admission to them shall be regulated by Rules hereafter to be framed as soon as a Collegiate class shall be organized in the University.

8. The "Endowed Scholarships" shall be formed from and out of the stipends of the "Studentships," until the organization of a Collegiate Department in the Madras University and admission of "Patchiappah's Students" therein. They shall consist of one of 20 Rupees per mensem, four of 15 Rupees per mensem, and one of 10 Rupees per mensem.

9. The "Endowed Scholarships" of 20 Rupees per mensem shall be appropriated to a Scholar in the fourth class, and shall continue for one year. The "Endowed Scholarships" of 15 Rupees shall be appropriated to Scholars in the third class, and shall continue for 2

years ; and the " Endowed Scholarships" of 10 Rupees per mensem shall be appropriated to a Scholar of the first class upon his promotion to the second class and shall continue for 3 years.

10. The " Endowed Scholars" shall be selected out of Patchiappah's Free Scholars, by the Head Master according to merit upon passing the Annual Public Examination of the High School, and reported by the Secretary for approval by the President and Governors of the University, and their appointment shall be then notified by the Secretary to the Trustees of Patchiappah's charities for confirmation.

11. It shall be the privilege of the " Endowed Scholars" of the fourth class to compose and deliver (subject to the approval of the Trustees of Patchiappah's charities) the English address in praise of Patchiappah's Educational charities at the annual celebration of Patchiappah's Founder's day.

12. The " Free Scholarships" shall be 30 in number, and the stipend shall be 4 Rupees per mensem each, wherewith to pay the High School Fee and they shall be held for the term of 4 years.

13. The number of vacancies of Free Scholarships shall be reported by the Secretary of the Madras University on 1st January each year, and the Trustees shall thereupon propose them as objects of competition for the pupils of any School or Schools supported by Patchiappah's charities. Candidates for admission to the 1st or lowest class shall be under the age of 14, but those qualified for the higher grades in the University shall be admitted at the following ages respectively :—if qualified for the 2d class up to the age of 16—for the 3d class 18—for the 4th or highest class 20; and there shall not be less than 3 for each vacancy. The best of such Candidates having been selected upon an examination to be held between 1st January and Patchiappah's Founder's day, the actual appointments to the vacant " Free Scholarships" shall be made by the Trustees on Founder's day in such public manner as they may think fit. The Board of President and Governors of the University shall have authority to reject on account of incompetency.

G. N. Taylor,
Acting Secretary.

Rules for awarding " Patchiappah's Vernacular Prize."

1. That an Annual Prize shall be established of the value of 70 Rupees, and be denominated " Patchiappah's Vernacular Prize."

2. Such Prize shall be awarded to a Scholar of the 4th class, if not of less than one year's standing in that class.

3. The Prize shall be awarded for the best exposition (as distinguished from more translation) in some Vernacular language, to be from time to time selected by the Head Master, of any Discourse, Lecture, Essay, or Treatise, being the work of an English author on any subject of Science, Philosophy, or Literature.

4. The subject for the Exposition shall be given out three months at least before the Anniversary, and the exposition be delivered in two weeks at least before the Anniversary.

5. The Text of the subject to be expounded shall not, in general, exceed 50 ordinary printed octavo pages, and may be less according to the nature of the subject.

6. A Committee shall be selected by the Board to award the Prize.

7. The Prize shall be publicly conferred by the President on the day of the Anniversary.

8. The Prize shall consist of bound Books, lettered and embellished like the other Prize Books, and with the addition of the letters "Patchiappah's Vernacular Prize;" and these Books shall be inscribed in the hand of the Secretary with the year, the name, and the subject of the Exposition.

G. N. TAYLOR,
Acting Secretary.